THE

MEDICAL AND SURGICAL REPORTER.

WHOLE SERIES, NO. 230. } PHILADELPHIA, MARCH 16, 1861. { NEW SERIES, VOL. V. NO. 24.

ORIGINAL DEPARTMENT.

LECTURES.

Clinical Remarks on Pneumonia. Delivered at the Pennsylvania Hospital, February 8. Illustrated with Cases.

By Francis G. Smith, M. D.,
Attending Physician.

The patient before you is a sailor, who contracted his disease about two weeks ago in consequence of exposure to extreme cold. The vessel in which he was working was caught in the ice, and the crew were obliged to work day and night in order to liberate themselves.

Shortly after the exposure, he was attacked with chill and shiverings, (which, by-the-way, is an important point to remember, as indicating the date of commencement of the disease,) which were afterward followed by fever, with intense pain in the side, cough, difficulty of respiration, exceeding febrile reaction and expectoration of a rusty looking matter; in short, with all the symptoms of an acute pneumonia.

He had passed through the first stage (*engorgement* of the disease when he was admitted into the house, and presented well-marked symptoms of the second stage, or that of *hepatization*. You remember that, in acute pneumonia, there are three well-marked stages: first, that of CONGESTION OR ENGORGEMENT; second that of RED HEPATIZATION, as it is called, because the organ then presents the general appearance of the liver; and third, the stage of YELLOW or GRAY HEPATIZATION. Pneumonia consists in an inflammation of the minute air-vesicles and ultimate bronchial tubes, and of the parenchymatous cellular tissue, and is attended with the exudation, or pouring out into the air vesicles or minute bronchial tubes, of some of the plastic matter of the blood, which undergoes solidification, and causes the lung to lose its ordinary spongy appearance, and assume that of the liver; hence, this stage of pneumonia is known as the stage of hepatization.

The physical signs, which present themselves in the first stage, are regarded as pathognomonic of it, and consist in the presentation of a peculiar râle, known by the name of the *crepitant râle*, produced, I believe, by the separation of the walls of the minute air-vesicles of the lungs in the act of inspiration, after they have been rendered adherent in the act of expiration by means of the tenacious material which covers them.

As the disease progresses, this exudation increases, the air-vesicles fill up, and the lung thus becomes solid, and air, in consequence, no longer passes into these air-vesicles, consequently the crepitant râle disappears. The now solid lung is a better conductor of sound than it is in a state of health, or during the first stage of the disease; and the sound produced by the passage of the air through the bronchial tubes is more readily transmitted through the solid structure to the ear than it was in the first instance, when it was lost or diffused in these air-vesicles; hence there is now heard a sound which, though it existed before, was masked either by the vesicular murmur of health or by the crepitant râle of the first stage of the pneumonia, and which is known by the name of *bronchial respiration*.

In addition to this sign, percussion reveals a state of things which did not exist before. As long as the air is capable of entering into the vesicular structure of the lung, even when in an unhealthy condition, the lung is more or less resonant on percussion; but when the lung is filled up with exudation and rendered solid, on percussing the walls of the chest, instead of the

clear tympanitic resonant sound, there is a dull, flat sound heard.

In addition to these physical signs, a modified condition of the voice-sounds will be heard. In a healthy lung, when a patient speaks, you hear the sound of the voice diffused over the lung, and you are unable to distinguish the words which are uttered. The sound which is conveyed to the ear when a patient with a healthy lung speaks, is like that produced by a crowd at a distance, all speaking at the same time; you hear the voices but are unable to distinguish the words which are spoken. This is known as pectoral resonance. But when the lung becomes solidified, as in the second stage of pneumonia or in phthisis, the sounds are more distinctly transmitted to the ear, and you recognise what the patient says.

Another physical sign in the second stage can be detected by palpation. You perceive a certain amount of vibration of the walls of the chest, the *vocal fremitus*, in the healthy state. When the lung undergoes solidification, this vibration becomes exaggerated, and often by this sign the dullness, on percussion, which exists in pneumonia, may be distinguished from that which occurs when fluid is poured out into the pleural sac. If a thin stratum of fluid be interposed between the walls of the chest and the lung, the vibration of the voice will be lost and not be conducted to the walls of the thorax; but, if the lung be solidified, the vibrations will be transmitted through the lung to the walls of the chest, and thus will be distinguished by the hand applied to the chest.

When this patient came under treatment, he had gone through the first stage, had passed through the stage of crepitation, and had gotten into that in which there is dullness on percussion, increased resonance of voice, increased vibration communicated to the hand placed on the walls of the chest, and where there is also bronchial respiration distinctly heard.

In addition to these, there was another sign present, to which attention should be given.

It has been shown by Simon, and also by Redtenbacher, Beale, and Bennett, that in cases of acute pneumonia, there is an absence of the chlorides from the urine. Chloride of sodium and chloride of ammonium are found in normal urine, under all circumstances, in health; but when pneumonia occurs, from some reason not yet explained, the chlorides disappear while the disease is in the progressive stage; but as soon as the pneumonia begins to decline in the slightest degree, these chlorides return to the urine, thus affording a peculiar and valuable diagnostic sign of the progression of the case.

In the patient before us, who is now undergoing a process of resolution, there is a notable appearance of the chlorides in the urine.

The method of detecting the presence of chlorides in the urine is very simple. We have here the urine of this patient; it has a yellow, amber hue; I add to a small quantity of it one or two drops of nitric acid; a deposit forms, which, on the application of heat, is again dissolved: therefore, we know that it is not albumen, but is probably due to the presence of uric acid precipitated by the action of the nitric acid; if there be any chlorides present in this urine, they will be instantly decomposed, and the *chloride of silver*, in the form of a white precipitate, be thrown down, by adding to the fluid nitrate of silver in solution, as you see.

So long as the disease is in its onward course, from the first to the second stage, and from the second to the third, so long these chlorides will remain absent from the urine. They will be found, however, in the sputa: and there seems to be some attraction between the diseased lung and the chloride of sodium in the blood, so that as it is withdrawn from the urine it is communicated to the sputa; and as soon as there is a return of air into the solid lung, even before you can hear the returning crepitant râle, there will be a return of the chlorides to the urine. This is an important clinical fact worthy to be remembered.

Treatment of Pneumonia.—Not many years ago it would have been considered almost homicidal to allow a man to go through a pneumonia without drawing blood, either generally or locally; but, yet, if we are to believe the statistics presented by undoubted authorities, and also the evidences of our senses, they recover as well, if not better, without the abstraction of blood, and by adopting a full, sustaining treatment, with a process of elimination.

Dr. Bennett has shown, by observations drawn from large hospitals in Germany, in France, and in England, from cases which came under his own immediate observation, (in his Clinical Lectures, p. 295,) that during the practice of bleeding patients in pneumonia, the mortality was as much as one in three; when there was a moderate amount of bleeding pursued in connection with the mercurial and antimonial treat-

ment, the mortality fell to one in six and a half, or one in seven. Under his own observation the amount of mortality has been reduced to *one in twenty-six*, and this result has been brought about by the almost entire abrogation of the depleting practice, and substituting a sustaining practice, and of the use of therapeutical means calculated to assist in the elimination from the system of the morbid exudation.

Although the patient before us is of a hardy constitution, and sick under circumstances which would have borne bleeding well, he has not lost a drop of blood. He had a flushed face, a hot skin, and although not a very strong pulse, yet there was a sufficient amount of febrile action to encourage the abstraction of blood by those who favor the depletory plan of treatment. The nearest approach to it that we adopted was the application of a few dry cups over the region of the affected side as derivatives. He was given internally half a fluid ounce of the liquor ammoniæ acetatis; and had also administered to him every two hours a wineglassful of milk punch, alternating with a wineglassful of beef essence, under which treatment he has certainly greatly improved.

He has less cough, less pain, less difficulty of respiration; his pulse, too, is less frequent, having gone down from 104 to 82 beats in the minute.

When the cough was very urgent, he took $\frac{1}{12}$ grain of the acetate of morphia, in addition to the other medicine. Should there be no idiosyncrasy to interfere with its ordinary effect, this will usually be sufficient to quiet the cough.

Second Case.—This is also a sailor, who has been exposed much in the same way. He is also in the second stage of the disease, but in him there is a return of the physical sign of crepitation, indicating an approach to health.

This man was even more sick than the first, when he was received into the house; he was very feeble and exhausted, although he had the circumscribed flush on his cheeks characteristic of pneumonia; he was much more prostrated and feeble, and had been sick a longer time than the other patient. He has gone through much the same stages, and is commencing to convalesce.

In him, as in the other, there is a return of the chlorides to the urine. There is, also, another sign about this man, which is usually regarded as a favorable one. It consists in the existence of an herpetic eruption about the mouth. For some inexplicable reason this is, usually, regarded as a favorable sign. Whenever a patient, suffering under an acute disease, has a group of the herpetic eruption about the mouth, it usually indicates that he will, probably, get well, and the result generally proves the truth of the indication, unless some accident or complication occur to retard the progress toward health.

When he came into the house his respiration was exceedingly labored, death seemed almost impending, he presented the peculiar jerking up of the larynx, so significant of extreme danger.

Though this jerking upward of the larynx in patients very ill, is in itself, a very unfavorable omen, yet, when it was remembered that the patient had been brought from a considerable distance, by railroad and steamboat, and was suffering under extreme prostration, and, therefore, much more fatigued on that account, there was not so much importance attached to this sign as would have been under other circumstances.

He was immediately placed under the same plan of treatment as the other patient. He had dry cups put over the whole affected side, for in him the disease extended from the top of the lung to the bottom, and afterward a warm cataplasm of corn mush, with a teaspoonful of mustard mixed with it was applied, which has been kept on constantly since. It keeps up a steady, uniform, rubefacient effect.

If you are so situated that you cannot obtain this application, you may apply turpentine, wrung out of flannel, over the chest two or three times a day; this will also produce a genial, rubefying effect.

He has been taking of the spiritus mindereri f℥ss. every two hours, which has promoted secretion from the skin and from the kidneys, and has, also, assisted in promoting the resolution of the difficulty which existed in the lungs.

I am desirous of impressing upon you the observation, that, although pneumonia is an inflammatory disease, it requires, in most cases, sustentation, death taking place more frequently, I believe, from exhaustion than from apnea. It is interesting to observe how rapidly the physical signs will sometimes disappear in pneumonia, and the returning crepitant râle replace the previously exciting bronchial respiration, and the exudation disappear without expectoration. Probably a second effusion takes

place of a more liquid material than that which first existed, by which a solution of the solid, plastic matter, is brought about; this is dissolved and rapidly absorbed, and carried off by the kidneys.

Lectures on the Iris and Choroid and their Diseases.

By Laurence Turnbull, M. D.,

Ophthalmic Surgeon to the Howard Hospital.

THE IRIS.

To obtain a complete knowledge of the iris and choroid, so as to treat them successfully, it is absolutely necessary to enter upon a careful description of their anatomy, histology, and physiology.

The *iris* (a rainbow) is so named from its beautiful appearance and varied hue. Its color on its anterior surface can be examined and studied upon every living being, and it is it which lights up the face of wit, reason, genius, thought, by the accession of blood communicating to the whole eyeball, the expression, which has such wonderful power over us, more easy to perceive than to describe. By the careful study of the iris, much knowledge is also gained to the physician and surgeon of the symptoms of many diseases. It is suspended like a circular curtain, dividing the eye into two chambers, but these are of unequal size. In the anterior, or smallest, we have the cornea; in the posterior, the crystaline lens, etc. Yet, this division is not complete, for there is a circular aperture, called the *pupil*, (sight of the eye,) connecting these two apartments. This pupil varies in size in different individuals, and under different circumstances, especially of light and shade. For our purposes it may be regarded as a prolongation of the vascular tissue of the choroid, of which we shall treat of soon. It is attached by its outer margin closely to the point of union of the outer coat of the eye, or sclerotic, and to the cornea, by means of the ciliary muscular fibre; it is also strengthened by fibre from the elastic layer of the cornea. But its main-stay is the ciliary ligament, by its attachment to its circumference. In this situation and between the ciliary ligament, the cornea and the sclerotic, is inclosed a circular canal, named the *canal of Fontana*, so that in the healthy condition of the iris it requires a severe blow to detach the iris.

The posterior surface of the *iris* is covered with a thick, black pigment, except in the *albino*, which is a Spanish word, applied to individuals of the human race, who have the skin and hair white and the iris pale. When this pigment is washed off the surface of the iris is colorless, and its surface is marked by lines extending between the pupillary and the ciliary margins. This plicated arrangement gives a layer surface for the deposit of the pigment.

The *iris*, also, contains radiating and circular non-striated muscular fibres. They are most distinctly seen close around the pupil, and are least distinct midway between this and the ciliary margin. The iris is very vascular, obtaining its supply from the ophthalmic artery by the long ciliary and anterior ciliary arteries, being situated between the sclerotic and choroid coats in the cellular tissue. These arteries form a branched ring around the iris, and, as you will find, play an important part in its diseases—the *veins* of the iris following almost the same arrangement of the arteries—the only difference that the veins communicate with the canal of Fontana, before described, which is sometimes called the circular sinus of the iris. The ciliary nerves, about twenty in number, subdivide at the ciliary ligament, a few being lost in it, but the greater number passing on to the iris.

THE CHOROID.

If we now continue our examination of the iris, we can trace it backward, forming the outwork of a membrane, called the choroid, (likeness to chorion,) also, termed tunica vasculosa, is shown by removing the sclerotic coat, it is overlaying the retina, and can be seen through the delicate tissue of the latter. Its proper name would be the pigment coating of the eye, as other tunics of the eye are vascular; externally, it is of a deep, chocolate color. Near the optic nerves the sclerotic coat adheres very firmly, but its connection in the centre of the eye is very slight, its only attachment being delicate cellular tissue, so that effusion is apt to take place between it and the tissue of the retina. If we now remove the retina, which must be done with great care, the inside will be found perfectly black, and at a line corresponding to the commencement of the ciliary body, assuming a remarkably beautiful appearance, being thrown into a series of triangular folds, the ciliary processes. These commence at a waved line, the "ora serrata," at first

merely as streaks, but gradually become marked into distinct plications.

These ciliary bodies are extremely vascular; their points overlap the crystaline lens, and project into the aqueous chamber of the eye behind the iris, with which they are connected.

Fig. 1. A.

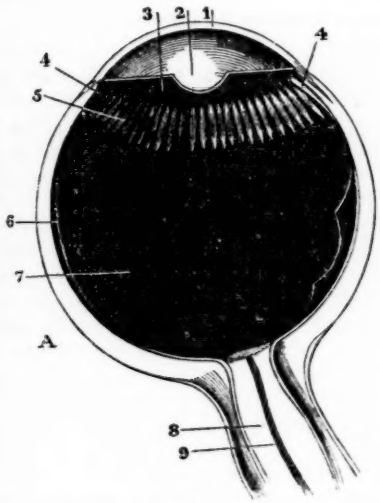

Fig. 1, A, is a beautiful illustration of 1. The Cornea; 2. The Anterior Aqueous Chamber; 3. The Iris; 4. Ciliary Muscle; 5. Ciliary Processes; 6. Sclerotic Coat; 7. Choroid in Section; 8. Optic Nerve; 9. Central Artery, passing in with the Optic Nerve.

Fig. 2. B.

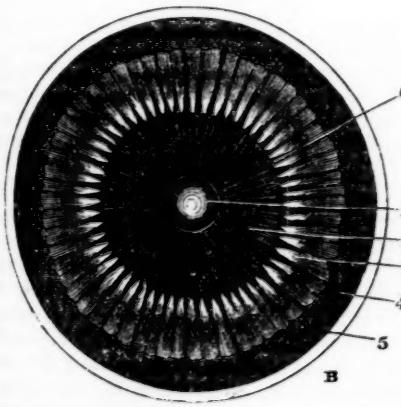

Fig. 2, B, gives an internal view of the Choroid Coat—4. Pupil; 1 and 2. Posterior Lamina of Iris, usually called the Uvea, showing its converging folds; 3. Is the Ciliary Processes; 6. Ora Serrata; and 5. The Sclerotic, or supporting tunic of the eyeball.

Over this pigment we have the arterial layer, which is formed of the ramifications of minute arteries, and is supposed to secrete upon its surface the pigment; the reflection of this layer forms the ciliary process, while the external layer over these arteries are the veins which return the blood; they are arranged in a peculiar manner, and on this account, have been named *venæ vorticosæ*.

The preceding drawings will facilitate the description.

I will enter upon the special Histology and Physiology at my next lecture.

COMMUNICATIONS.

Observations on the Medical Use of the "Vinum Sambuci."

By Laurence Turnbull, M.D.
Of Philadelphia.

The plant which yields the elderberry is familiar to almost every one, growing, as it does, in low, moist grounds, along fences, and on the borders of most of our streams in all parts of the United States. It flowers in May and June, and its berries are found ripe in September. They are of a globular form, and when perfectly ripe are of a beautiful, deep purple color. The botanical name of the plant is the "Sambucus," Sexual System, Pentandria Trigynia; Natural Order, Caprifoliaceæ.

The berries in whisky are a favorite domestic remedy in chronic rheumatism. It was in this form that they attracted my attention, as a whole family which I attended had found it a most useful agent in preventing attacks. I, therefore, propose a tincture, which, if properly prepared, might be a useful addition to our list of remedies. The following is the formula:

Tinctura Sambuci Fructus. — Take of elderberries two ounces; diluted alcohol, two pints.

Macerate for fourteen days, express, and filter through the paper.

The dose is from one to three fluid drachms in chronic rheumatism.

The berries have a sweetish, acidulous taste, depending upon a small portion of saccharine matter and malic acid which they contain. The expressed juice is susceptible of fermentation by the addition of a portion of sugar, and if properly prepared yields a very pleasant, agreeable wine, containing 8.79 per centage of alcohol.

Medical Properties and Uses.—It is diaphoretic and diuretic, and is, therefore, a useful remedy in rheumatic, gouty, eruptive, and syphilitic affections. It is also a valuable stimulant in sinking of the vital powers, but is contra-indicated in uric acid diathesis, as it is slightly acidulous. It is useful, however, in the phosphatic diathesis, its acidity tending to prevent the deposition of the earthy phosphates.

In a recent troublesome case of "acne," showing itself upon the skin of the face, the patient being feeble, I treated it by bi-carbonate of potash, freely diluted, applied to the part, and a portion taken internally, with use of powdered rhubarb and blue mass. The eruption, at times, would appear much improved, but as soon as the system would become debilitated from loss of sleep, etc., having an infant which was teething, several new spots would show themselves. I, therefore, tried several of the ordinary stimulants and tonics, but she was unable to take porter, ale, brown stout, brandy or whisky, sherry, Madeira, or port wines, nor could she bear quinine or bark long. I was at a loss for a stimulant until a student of mine,* a graduate of the Philadelphia College of Pharmacy, informed me of his having some of the elder-berry wine, which he had prepared for several years. I tried it, and it has been found very useful. My patient used two bottles, taking a wineglassful at dinner, or lunch, and occasionally omitting it at dinner, taking it in the evening. Her eruption is almost gone. She is able to perspire; the skin is, therefore, softer, and her general health is much improved, with greater freedom from neuralgic attacks in her eyes, which she was very subject to. I would, therefore, recommend a trial of it to my professional brethren in those cases in which the ordinary stimulants cannot be taken.

—o—

LONGEVITY OF CELEBRATED PHYSICIANS.

	Age.		Age.
Boerhaave,	70	Harvee,	81
Haller,	70	Mead,	81
Tissot,	70	Duhamel,	82
Gall,	71	Asturc,	83
Darwin,	72	Pinel,	83
Vanswieten,	72	Hoffmann,	83
Fallopio,	72	Ribeiro Sanches,	84
Jenner,	75	Swedenborg,	85
Heister,	75	Morgagni,	89
Cullen,	78	Heberden,	92
Galeno,	79	Ruysch,	93
Spallanzani,	79	Hippocrates,	109

*Wm. F. Buchanan, Eighteenth and Lombard streets.

Illustrations of Hospital Practice.

PENNSYLVANIA HOSPITAL.

MEDICAL DEPARTMENT.

Service of Dr. Gerhard.

(*January 26th.*)

CASE OF ALBUMINURIA.

This is a disease in which the prominent diagnostic sign is the evidence of albumen in the urine.

In common practice, the best mode of detecting its presence, is to hold some of the suspected urine in a spoon over the flame of a lamp, and if albumen is present, it will show itself by a deposit of whitish flakes. This is the best and safer test, by heat; but there is also a test by nitric acid, upon the addition of a few drops of which, to urine containing albumen, a similar precipitate will be formed.

Albuminuria is a disorder which has only attracted notice within the last twenty or thirty years. It was generally supposed to be connected with other diseases.

There is no doubt, that in most cases where the urine contains much albumen, that the patient will complain of other disorder than that of the kidneys, in which cases the peculiar condition of the urine may remain only for several hours, but when the albumen continues to exist in the urine for a good while, there is always produced a certain degree of pallor of the skin, and a disordered condition of the whole body. Afterward, and sometimes before the skin is excessively pallid, dropsy appears, of that kind known as anasarca, which condition, however, is by no means confined to cases of albuminuria; existing also in diseases of the heart, and other organs, as a symptom.

The dropsy from disease of the heart is different; in albuminuria there is more of a general deposition of water in the cellular tissue of the whole body; whereas in disease of the heart it takes place at first in the upper extremities, and there is not the same general infiltration of the cellular tissue of the body with liquid, and a large quantity of effusion will be found local, unless it tends to accumulate at the lower portion of the body.

There is, in this disease, loss of strength, and diminution of appetite, and want of power to move about, etc.

It is often connected with other causes of dropsy.

Dropsy connected with disease of the liver, assumes the form of ascites rather than general anasarca, though in the latter cases the liver is apt to be somewhat altered; and hence some lesions of the liver will often accompany anasarca.

In disease of the kidneys we often find a

connection with other disorders; thus the heart is sometimes primarily involved, and sometimes secondarily affected; and so with the liver.

In disease of the heart, where the patient is so far advanced as to become dropsical, it is very common to observe that he also has disease of the kidneys, in the alteration of the cortical substance which produces albuminuria, and also that he has disease of the liver; but the reverse of this is not true, for there may be disorder of the kidneys, without producing disease of the heart.

A large and swollen face is not always to be relied on as diagnosis of dropsy, except in heart dropsy.

The woman before the class has a good color; whenever the skin presents this ruddy appearance of the cheeks, it shows that the blood circulates through the body with facility, and contains a good proportion of red particles.

The hands do not usually show slight effusions, though it is seen in the legs, from their being the most dependant portion of the body.

The hands of this patient are slightly swollen, the limbs are more swollen, and show obvious pitting upon pressure.

She has no pain, but she has had a cough for six or seven weeks, and a good deal of dyspnœa. There is an abundant mucous and sonorant ronchus running up and down the whole of the sides of the chest, but there is much more mucous ronchus at the lowest part, therefore there is bronchitis in addition to the other disease.

There is also alteration of the heart coincident with the albuminuria.

There is a bellows murmur, coincident with both systole and dilatation, at the mitral valve, showing a dilation of that valve; above the semilunar valves there is a little roughening of sound, but not to any very great degree. There is also a greater extent of impulse than there should be, though the force of the impulse is diminished, giving, as it were, an increased and diminished impulse at the same moment.

There is a slightly increased dullness of sound, just enough to account for a little effusion of serum into the pericardium.

The recognition of old inflammations of the heart is very difficult, but there very often exist evidences of them. The patient has had the dropsy only for two weeks.

I give the patient a bath, the object being to stimulate the skin to action, and a warm bath is good for this purpose, unless the patient has to be exposed to a good deal of cold.

The best laxative to give in this case is some saline purge; sometimes a simple infusion of juniper berries and cream of tartar, which acts as a laxative and also as a diuretic. Sometimes I give a purge, composed of sulphate of magnesia, or of Rochelle salt.

There is advantage often in giving mercurials, so as to produce a slight alterative effect; and this is one of these cases; the patient is robust, has not lost flesh nor the power of making a good amount of blood. To do good, the mercury must be given in minute doses, as $\frac{1}{16}$ grain of calomel three times a day, with good diet at the same time. Larger doses of calomel will make too much alteration.

The patient has been taking, three times a day, a combination of 1 gr. digitalis, 2 grs. squill, and $\frac{1}{16}$ gr. calomel, which treatment will be continued.

ANEURISM OF THE AORTA.

This young man looks as if he were in feeble health. He has had an affection of the chest for a year, with uneasiness and oppression, and for the last three months has had a cough, previously to which he had simply pain in the chest.

He has palpitation of the heart, which is the principal symptom of his disease in the chest, but he does not know how long these palpitations have existed.

Examining the formation of his chest, it is found to be narrow and small, and a little more contracted on the right side than upon the left, but there is not a very great difference. This condition may depend on an old adhesion, or some other cause.

Respiration is a little rough, and on palpation there is a strong impulse which rises up against the finger; this impulse can be distinguished to a slight degree behind the sternum, and behind the right clavicle there is a strong movement, and a certain thrill communicated to the finger. On the left side the impulse is very slight.

The arteries are strongly developed throughout the course of the neck, and they have a strong impulsion. With this condition of things there is a double mitral sound, most distinct during the act of diastole; during the act of systole there is a slight regurgitating sound; at the semilunar valves of the aorta the sound is single and confined almost entirely to the act of systole.

The whole size of the heart is increased. There is a slight but perceptible protuberance in the chest at the locality of the heart itself.

This case, then, is a disease of the large artery, belonging to the class called aneurism. It is a false aneurism; there is a dilatation of the walls of the aorta, but there is no protuberance resulting from perforation of the outer membrane.

There is also dilatation of the mitral valves, and thickening of the semilunar valves. Besides this, there is a certain degree of obstruction at the upper portion of the lung which, however, is but slight.

The patient has not the appearance of a perfectly regularly constituted man, though he may have been so, he has too boyish an appearance.

He can be put under such circumstances as

will prevent any increase of the development of his disease, and can have removed from him many of the accidents to which it often gives occasion.

Warmth will be applied to his chest by means of flannel. If he were young, an attempt would be made to dilate his chest by forced respirations, taken while the arms are extended, so as to expand the lungs to their utmost capacity. In cases of the kind it is matter of great importance in young subjects to cause their chests to be dilated by directing them to throw their arms well forward, and as they throw their arms back, to take a full inspiration. This produces a full dilatation of the chest, but it should not be persevered in more than once or twice at a time, and should not be carried to too great a degree, lest it may produce a tendency to hemorrhage.

Even in cases of disease of the heart, and more so in cases of disease of the lungs, if a patient be advanced in life, it is impossible to dilate the chest; nor can it be dilated when the contractions are dependent on adhesions from previous attacks of pleurisy; but often when adhesions do exist, we find sometimes a strong and decided dilatation of the chest will cause it to enlarge on the contracted side.

It will be impossible to quiet the heart merely by the internal administration of medicine.

The patient must be careful in his diet and take nothing disturbing; nothing like coffee or tea in any quantity, nor must he use tobacco.

He may be given something to produce an effect on his heart, but not a great deal, for there exists an organic alteration beyond the reach of medicine.

Sometimes, in young subjects, these organic alterations can be reached; a moderate amount of palpitation, produced by a slight degree of hypertrophy, may be cured; but if the change be great and dependent upon a disease of the valves, or, if it succeeds to a case of acute rheumatism, it cannot be cured.

By altering the condition of the patient's blood, his whole system will be benefited, and, therefore, he will be given a good diet of nutritious articles of food.

Counter-irritants will be applied to his chest, and he will be given internally, cod liver oil, and the fluid extract of cinchona.

Cod liver oil will produce a large amount of fatty matter in the blood. It is not better than other oil as regards its medicinal properties, only it is more digestible than other oils, and, therefore, more easily assimilated.

This will antagonise any tendency to phthisis which may exist.

To act on the blood, the fluid extract of cinchona will be given in doses of a drachm three times a day, and at the same time a grain of digitalis will be administered three times a day. This treatment has often been found very beneficial in diseases of the heart.

SURGICAL DEPARTMENT.

Service of Dr. Pancoast.

January 16th, 1861.

AMPUTATION OF THE THIGH FOR UN-UNITED FRACTURE OF THE FEMUR, WITH ANCHYLOSIS OF THE KNEE-JOINT—REMARKS ON THE PATHOLOGY OF THE DISEASE, ETC.

Nine months previously, the patient, an adult male, had been brought into the house. Eight months before his admission he had suffered a fracture of the femur, and false joint had formed. He was brought in with the limb shortened 3½ inches.

The limb was brought down, and the ends of the fragments secured in apposition, and irritated from time to time, in the hope that, even after so long an interval as eight months, union could be procured.

These attempts were continued for three months longer, in the hope of being able to avoid the necessity of resorting to resection or any other plan for the cure of false joint, or to amputation. These efforts failed, and the man desired to have the limb removed.

Dr. Pancoast then determined to try another and a new plan.

He cut down upon the leg and sawed off the ends of the fragments, and threw the leg around, making the bones overlap each other; with one of the Italian tourniquets he pressed the soft parts to one side, and with a common gimlet bored a hole through the two ends of the fragments, making an opening through the skin on the other side; he then passed a large silver wire through the holes he had made in the bone, and carried the ends round on the outside of the bone.

The consequence was, that the two bones had a silver pin passed through their centre and brought again on the side and twisted down to the orifice, holding the ends together.

This did not produce the slightest pain nor irritation, the skin even did not redden, and the operation failed.

During this operation the cause of the formation of the false joint in the first instance was discovered, as also the reason why it had not been cured by extension and irritation of the fractured ends of the bone; and also why the wire suture failed.

This was because the bone had been broken just at the point where its nutritious artery entered. The artery had been destroyed by the fracture, and consequently its nutrition being impaired, the bone had become hollow, and when the upper fragment was bored through, the shaft was found to be very thin, embracing a large cavity, so that there was nothing to give vitality to the lower end of the upper fragment, to enable it to throw out plasm which might

be consolidated into cartilage and bony matter, so as to unite the two fragments.

This suture was allowed to remain in the bone from June until December, and then it was taken out, when some erysipelas followed its withdrawal, previous to which there was no inflammation or irritation whatever.

Ordinarily, the ends of the bone are sawed off, but if this had been done in the present case, where the shaft was very thin, all hollowed out, there would have been no place for union, for the parts had not enough nutriment to keep their own original structure, but had gradually been absorbed. The ends of the bone had become covered with a sort of fibrous structure.

In consequence of these failures, and at the solicitation of the patient, it had been decided to amputate the limb.

In order to give the man as long a thigh as possible, the whole of the upper fragment was to be left, so the operation would be a division of the thigh bone at the junction of the middle with the lower third.

Liston teaches not to amputate lower than the upper third, but experience has proved that this can be done advantageously.

In performing this amputation, whether by the flap or circular operation, care must be taken to secure material enough to cover the stump well. If it is a flap operation, the bone must be uncovered 1½ or 2 inches above the edge of the flaps; and in the circular operation the muscles should be drawn up 1½ or 2 inches above the end of the bone, so that when once sawed off the divided end shall not be seen again.

In the present case two inches of muscle will be left to cover the end of the upper fragment, making both skin and muscle flaps, two inches of skin below the section of the muscle, and 1½ inches longer than that, so as to bring the incision nearly to the knee-joint.

The leg was bandaged as tightly as possible, as far as it could be bandaged so as not to interfere with the operation, in order to force the blood in the veins, superficial and deep, out of the circulation.

The flow from the femoral artery on the front part of the thigh was controlled by the tourniquet.

The operation was then performed, cutting the ham-string muscles two inches shorter than the muscles on the front of the thigh, as they contract and carry up the skin with them, so that often the cicatrix of the stump is drawn away from the end of the bone and toward the back part of the leg.

The skin flaps were then dissected up for two inches, and retracted; the ham-string muscles were divided very nearly where the skin was divided, but a little above that point; the skin was then retracted two inches, and the remaining muscles divided circularly down to the bone; then the muscles were dissected from the bone up to the retractor, and seizing the limb and twisting it, the lower fragment of the femur was torn out of the surrounding flesh, slipping from the periosteum, leaving a long tube of periosteum. The lower fragment overlapped the lower end of the upper fragment some three inches.

There was no danger of phlebitis, because there had been no sawing through of bone. In cutting into the medullary portion of a long bone, phlebitis is more apt to follow than when the spongy portion is cut through; the reason for this is not exactly known. After caries it often follows, resulting in pyæmia.

The fragment removed, showed an attempt at ossification at the point where the holes had been drilled to keep the fractured ends together.

Subsequently, an examination of the part removed was made, to see the condition of the parts. Laying open the anterior portion of the joint, it was found that the patella had become firmly adherent to the surface of the bone at the upper part of the joint. This was separated, but it was still impossible to straighten the joint, there being a great number of adhesions, which had taken place after the absorption of the cartilage, on the condyle of the joint, and the formation of false membranes which had run across to be connected with the tibia and patella. These adhesions came from the synovial membrane.

Continued motion is necessary to stimulate the synovial membranes to throw out their fluid, and keep their fringes out of the joint proper.

If there is no motion to keep up synovial secretion, these fringes bulge forward between the bones and absorb the substance of the cartilage, and lick it up before them, as it were; and when they have taken away the cartilaginous incrustation, there is an analagous condition on the opposite sides of the joint, and they unite, forming ligaments which may be developed not only into fibrous structures, but also into cartilage, or, still further, into bone.

Fourteen Days after the Operation.—The man was doing well, no bad symptoms having followed the removal of his limb.

The tube of periosteum left in the limb had suppurated a little. There had been no retraction backward of the lower part of the wound.

He had lost his appetite, having a disgust for food. Quinine and iron were administered, with beef tea and milk punch; and he was given the following mixture:

℞. Syrup. aurantii, f℥j.
Acid. nitrosum, f℥ss.
Acid. muriaticum, f℥j. M.

The dose being a tablespoonful, with an equal quantity of water, taken before each meal.

This was employed as a tonic to restore the

appetite. Sometimes it will irritate the stomach, when it should be discontinued.

The patient made a rapid recovery, and on the 6th of February was brought before the class, previous to his discharge from the house, and pronounced well.

ORGANIC STRICTURE OF THE URETHRA, ETC.

(*See* Reporter, *present volume, page* 478.)

The result of the ineffectual attempt to introduce the waxed bougies (which see as above, etc.,) was, that some hours after the patient could not pass a drop of urine, the bladder filled up, and a large quantity of urine collected. The point of the bougies may, perhaps, have produced a little inflammation in the mucous membrane, which lines the canal, for often these applications stimulate the muscular tissue around the urethra and makes it contract, producing spasm; and, therefore, the patient, after the introduction of these instruments, in these cases, must be put to bed, and fomentations be applied about the abdomen, and opiate injections employed, or suppositories of opium and belladonna; a slight diuretic and diaphoretic should be administered, and perfect quiet enjoined, in order to relax the spasm, and by this treatment, in 36 or 48 hours, if not sooner, the urine will begin to flow as before.

The patient now (a week after the application of the bougies) passes his urine with even more facility than before, not from any good that resulted from the use of the bougies, but in consequence of the medical treatment that was instituted.

In order, if possible, to avoid the more serious operation of the perineal section, further attempts were made to introduce the bougies, though with little hope of success.

Several wax bougies were employed, but when they came against the stricture they doubled on themselves, and the attempt, therefore, failed.

Dr. Pancoast then divided the stricture by means of a blade concealed in the extremity of a catheter-like instrument, which is sprung forward as the point of the instrument gets against the obstruction.

This is always a somewhat hazardous proceeding, because the surgeon cannot always be sure that the knife gets exactly at the centre of the stricture; and if some of the parts surrounding it are wounded in the operation, if the patient is allowed to micturate immediately after making the division, the water may come through the opening made, and there may be a distilling into the perineum, leading, perhaps, to the formation of a perineal abscess.

It is, therefore, necessary that the patient should refrain from voiding his urine for a few hours after the performance of the operation, during which time the blood will be blocked up by the organization going on, and the parts becoming infiltrated with blood, which coagulates when the urine is passed, the water will not escape into the perineum, while, at the same time, if the fibrous part of the stricture has been cut in the operation, the division will remain open.

Three days subsequent to this operation, the patient was again brought before the class. He had been able to pass water in a much larger stream, and did not suffer in consequence of the operation.

Still, a cat-gut bougie could not be insinuated along the urethra to a greater distance than before the operation.

Attempts will, however, be gradually made to introduce a cat-gut bougie of small dimensions, and when once one of the smallest diameter can be passed into the bladder it will be allowed to remain some time, during which period it will swell to nearly twice its diameter, when it will be withdrawn and a larger one introduced, and that allowed to remain, thus soon gradually dilating the passage.

Should these attempts fail, after persevering in them a justifiable length of time, it may become necessary to resort to an incision in the perineum, and divide the parts, which operation will be certain in its results.

CHRONIC DISEASE OF THE ANKLE-JOINT.

This exists in a young, adult female. She cannot bear the slightest motion of the joint.

She came into the house with the joint rigid and tumid, and was made to undergo passive motion of the joint, which has increased the inflammation to a very great extent. The disease is in the synovial membrane.

The part has been leeched; sedative lotions have been applied; rest in a splint with the limb elevated; she has taken, internally, iodide of potassium; calomel and opium have not been administered, for there is a dyscrasia in the part diseased, which might have run into scrofula or white swelling of the ankle joint, which is accompanied with degeneration of the synovial membrane and the bone, the cause of which must come out of the blood. It is a plasma of the blood thrown down when the blood itself is not of a healthy character in the neighborhood of morbid parts, and there is a morbid lymph effused which may become scrofulous or tuberculous matter. The synovial fringes around the joint are diseased.

The joint was moved to break up any bands which might exist, and then the hot iron was applied, to modify any inflammatory action of the synovial membrane. The iron was passed over the surface of the joint in lines, very lightly where they passed over the malleoli. The heat thus penetrates into the tissue, and there modi-

fies the molecular life of the parts, which cause the difficulty.

After the operation, the parts were covered with chloroform to overcome the smarting from the burn, and then the cold water dressing was directed to be used.

By-and-by a little slough will be detached, the iron not having been applied strongly enough to destroy the skin, and there will be an issue made all round the joint, and the foot will be put at a right angle and kept in that position.

This treatment will prevent the degeneration of the structure into white swelling, which would necessitate an amputation of the limb.

STAPHYLOMA OF THE CORNEA.

Staphyloma racemosa is a chronic inflammation of the membranes of the eye brought about by a varicose condition of the ciliary plexus of veins belonging to the choroid coat.

Among the internal remedies given in this disease, tincture of veratrum viride, or aconite, combined with diuretics, are sometimes found of use. Here there is chronic ulceration of the cornea, which has weakened its texture so that the pressure of the recti muscles have driven forward the tissue of the iris so as to make the cornea bulge.

The sight of the organ is gone.

The mass, therefore, has to be removed, not because it is a deformity in this case, but because the staphylomatous affection is very great and affects the eye on every side.

Mr. Cooper White is now studying the effects of this disease in one eye upon the other, and he would remove the whole organ were this case under his care, to prevent bad effects on the other.

In performing this operation the knife is to be passed as though to extract the lens, and the part is to be cut half off, and when the instrument is removed there is a tendency to turn the other half up, and there is a better chance to make the section of the ball.

After the operation both eyes are to be closed.

The best plasters to be used are those made of india rubber.

JEFFERSON MEDICAL COLLEGE.

SURGICAL CLINIC.

Service of Dr. Pancoast.

SYPHILITIC AFFECTION OF THE ELBOW-JOINT.

The patient is a female, and the case is brought to the College as being the result of mechanical injury.

It is, however, a syphilitic affection of the cellular tissue of the elbow joint.

There is a boggy swelling, very painful, and more so at night than in the day time. The patient complains, moreover, of pains at night in the collar bone, and sometimes in the ankle.

The swelling is exceedingly hard to the touch, and hot, and the hardness extends not only to the tendon of the triceps extensor muscle, but beneath it to the periosteum, a syphilitic affection of which is the origin of the whole of the inflammation and swelling.

The patient has occasionally had pain in the forehead, on which there was, at one time, a lump, which disappeared after being leeched.

This is a case of *cellulitis*, having its origin from the periosteum.

It requires leeching, and forty American leeches will be applied to it, and the arm will be kept in a sling, in a flexed position, so as to relax the flexor muscles, and it will be surrounded with a strong lotion composed of an ounce of the extract of lead, with an equal quantity of laudanum, in six ounces of water. Lint will be wet with this and applied to the entire arm, and about this a piece of oiled silk will be loosely laid.

As this is a constitutional disease, it requires, also, the internal administration of remedies to prevent the formation of subcutaneous tubercles, which might go on to suppuration, and form ugly ulcers.

Ten grains of the iodide of potassium will be given three times daily, after meals; and, in addition, some form of mercury should be given, either the protiodide or the corrosive sublimate.

She will be given a pill containing four grains of gum guiacum, with an eighth of a grain of opium before each meal, and the 10 grs. potass. iodidi after meals, in a little compound extract of sarsaparilla; and for the pains at night, which are the effect of this kind of rheumatism, she will be given twenty drops of the wine of colchicum, and 40 drops of the solution of the watery extract of opium or McMunn's elixir, which is nothing else, or, if preferred, the Dover's powder may be given.

WHITE SWELLING OF THE KNEE-JOINT.

The patient is a little girl, æt. four years and four months. It is a case of white swelling of the knee-joint in the last stage of treatment, when the cure has been in a great measure effected.

The disease began six months ago, occupying the right limb. It has been painted with iodine, and the case was treated without a splint. There is a little contraction of the pectineus muscle.

The active stage of the white swelling has passed by; there is a good deal of heat in the limb, and over it there are blue veins merely showing distension, there being more fluid in the joint than there should be. The ligaments being thickened, the ham string tendons are

found very tense, and resist the straightening of the leg.

Sometimes you see a child beginning to get sick, and over the bridge of the nose you observe a dilated varicose vein; I never see this in a child with the follicles on the tongue prominent, but I feel sure that it is the commencement of a scrofulous dyscrasia which can be arrested at that stage, but which, if not then arrested, will develope itself as white swelling in the knee, or the hip, or in the vertebræ.

In treating these cases, the general health must be improved by salt water bathing, and the proper administration of nutrients. They should be purged because the same condition of the tissue on the tongue shown by the prominence of the follicles, exists all the way down the alimentary canal, keeping the mucous membrane so coated with unnatural mucus that it cannot be taken up from the surface.

It will be better taken away with calomel, rhubarb, and a little exsiccated carbonate of soda. A little aromatic solution of quinine should be given before meals; the best of food should be given, absolutely forbidding any sort of sweet-meats of any and every description; no salt meat should be given, but good substantial food; even ice cream should be interdicted, and all sorts of preserves and sweet cakes, even gingerbread. Milk punch and claret wine may be given, and such things as will strengthen the body and improve the health.

It is too late to straighten this child's leg. The synovial membrane has had its fringes which surround the joint, and move with it back and forth, injured.

The case must be treated as a case of inflammation.

A few leeches should be applied to take down the excessive action of the part; cover it with the extract of lead water and laudanum lotion.

The limb will be placed in a splint made of sole leather, moistened and moulded to fit the part, or anything else may be substituted which will hold the limb quite still.

By-and-by, when the heat subsides, it will be wise to hold the limb straight, and it may, perhaps, be necessary to divide the tendons of the contracted muscles.

The joint will never have again its natural mobility: the cartilage is gone, and cannot be reformed; still, considerable motion may be procured.

Every third or fourth night the patient will be given a pill, containing 2 grs. of powdered rhubarb, 1½ grs. calomel, and 2 grs. of the exsiccated carbonate of soda, made up with gum arabic.

She will also be given three times a day, before meals, a teaspoonful of a mixture, composed of 12 grs. sulphate of quinia, 20 drops of aromatic sulphuric acid, 2½ fluid ounces of syrup of gum arabic, and half an ounce of tincture of cardamoms.

Sometimes in straightening the limb in a young child, if the joint will not yield, the bone will give way at the epiphysis; union very soon takes place between the separated parts.

BROOKLYN MEDICAL AND SURGICAL INSTITUTE.

Clinic of Prof's Louis Bauer and Whaley.

Reported by Charles E. Halsey, M. D.

DIASTASIS OF THE LOWER EPIPHYSIS OF LEFT FEMUR—SINGULAR DEFORMITY OF THE EXTREMITY—TOTAL EXSECTION OF THE KNEE-JOINT—RECOVERY WITH A USEFUL LIMB.

On the 9th of October, 1860, a number of prominent medical gentlemen assembled at the Institute to witness the exsection of a knee-joint, which Dr. Bauer proposed to perform upon Francis Shaw, a healthy lad, 14 years of age. The patient presented a rare and singular deformity of the left lower extremity, which materially interfered with its usefulness, both in standing and walking. Not only was the form of the knee-joint greatly altered, the internal condyle of the femur being very much enlarged, entirely outside of and overlapping the articulation, while the external condyle was totally absent. The joint was so loose as to allow the shifting and sliding of the articulating surfaces and lateral bending of the tibia upon the femur to an angle of 90°. Ordinarily, the leg occupied a lateral angle of about 45°, with eversion of the toes, and the deficiency in the length of the extremity amounted to three inches, which would have been considerably greater if the boy threw his entire weight upon the affected side.

In introducing the case to the audience, Dr. Bauer remarked that it had excited his interest to an unusual degree, both from the singularity of the deformity and its pathological character. It should be understood that the patient, a well-developed child, when seven years of age, sustained an injury in his left knee by a blow from an iron rod. Although disabled thereby, there was no noticeable change in the appearance of the extremity, and the physician who visited the patient soon after was satisfied that the injury amounted to no more than a contusion of the joint. Advising rest and cooling applications, the doctor did not think a second visit requisite. Thus the patient was left to himself, and in about three weeks he resumed locomotion, pain and swelling having in the meanwhile subsided. Up to that time, there was *no deformity;* since then, however, the malposition of the leg commenced, and, steadily growing, it has now attained such an extent as to cripple the patient

and to disqualify him for any business save some sedentary occupation.

A circumstance most aggravating is that the joint cannot be straightened, and is so loose as to change position with the amount of weight thrown upon it. This perfect looseness of the articulation, and the lateral angle between the femur and the leg varying from 45° to 90°, accordingly, accounts for the most awkward gait of the patient, precluding at the same time mechanical appliances as utterly impracticable.

Particular attention was called to the singular shape of the lower epiphysis of the femur. The ordinary contours of the joint had entirely changed. The internal condyle of the femur protrudes inside the joint, and the external is entirely absent. The articulating surface of the femur is spread and flattened, forming with the axis of the femur an acute angle.

The external articulating surface of the tibia projects, at least, half an inch beyond the femur; the patella is thrown outside, and gives the same direction to the quadriceps muscle.

In reference to the pathological nature of this deformity, Dr. Bauer expressed himself as uncertain. It might have been fracture of the external condyle, yet this was incompatible with the absence of deformity and crepitus

Fig. 1.

after the injury; nor could he understand why the external condyle should have disappeared entirely. He, therefore, inclined rather to a diagnosis of *diastasis* of the lower *epyphisis* of the femur, which would satisfactorily account for the integrity of the joint and its shifting from a transverse to an oblique position. There were, however, some points in the case which were inexplicable.

Total exsection of the joint was advised as, in every point of view, preferable to amputation; and it was thought the constitutional condition of the patient encouraged success, with hope of a useful extremity.

Ably assisted by Drs. D. Ayres, Whaley, and others, Dr. B. performed the operation in the usual manner—first making a semilunar flap in front, removing the patella, the articulating surface of the femur and tibia, and moving together the internal condyles of the femur and tibia respectively. The bones bled very freely, and it was deemed necessary to leave the wound open until all hemorrhage should cease. Great care was bestowed in thoroughly removing all serous membrane and exposed bursæ, as recommended by Prof. Bilroth, of Zürich, who maintains that, when left behind, they will give rise to suppuration, fistulous tracks, and not unfrequently cause a fatal termination of the operation. Next, the patient was placed carefully upon an extemporaneous apparatus,

Fig. 2.

consisting of a thigh and leg-splint with footboards, leaving the knee-joint entirely free and accessible.

But very slight reaction followed the operation, requiring no treatment whatsoever. The joint was covered with water-dressings, first cold and subsequently warm, and surrounded with oil-silk. At night, a small anodyne was given; the diet, after a short time, was allowed generously, and was never changed. The future dressings of the patient were always preceded by a warm bath, while throughout, the most rigid cleanliness was observed.

The greater portion of the wound healed by first intention—the remainder by kind and active granulation. With the exception of a fistulous track, from the external angle of the wound toward the supra-patellary bursa, which required division, nothing untoward happened during the whole treatment.

At the end of the first month, the wire was removed, it having become perfectly loose without cutting through the bone. The patient, at the sixth week, could sit up, resting the affected limb upon a chair. Recovery, indeed, was almost complete. At the end of the eighth week, the patient walked from the Institute, supported by his little brother, the distance of two blocks, to the cars.

Four months from the day of operation, the patient presented himself at the clinic, when there was found to be a most perfect union of the corresponding bones, by dense and short, fibrous tissue, allowing of mobility in the slightest degree. The form and appearance of the extremity is most satisfactory. No tumefaction or enlargement at the place of union; length deficient by *two* inches only, and its usefulness firmly established, bearing not only the body but additional weight upon it. A high-heeled boot greatly modifies his limping gait. The accompanying figures (figs. 1 and 2) give a correct representation of the lad's appearance before and after the operation. From the fragment of bone removed from the femur, it seems to be conclusive that diastasis had been the cause of the trouble, for the intermediate cartilaginous line between the diaphysis and epiphysis of the femur being still extant and only partially ossified, shows a very oblique angle, instead of a right angle, with the axis of the femur, while all the remaining parts of the joint had preserved their integrity intact. The external condyle of the femur seems to have been gradually carried off by absorption, the entire weight having been thrown upon that point. The articular surface of the tibia is rather more convex, and therefore allows the rather easy lateral sliding.

CASE OF EXSECTION OF THE ELBOW JOINT.

Reported by Geo. A. Ostrander, M. D.

Robert Cahl, æt. 11 years, entered the Institute January 6th, 1861, giving the following history:—He has always been a healthy boy; his father died of phthisis. He does not know of having injured his elbow in any way. On thanksgiving day last, (29th November,) he first felt pain in it, although it had then been swollen for some time previously. The pain continued to increase, and, on the 4th of December, he applied to the clinic for aid. The joint was found to be swollen, hot and tender, and motion painful. He was directed to apply evaporating lotions, and was given a purgative.

In two or three days, he again presented himself, and, upon examination, fluctuation was discovered. This was looked upon as bursitis, and, upon being opened by Dr. Halsey, matter escaped. A probe was then introduced, but no denuded or carious bone discovered. Poultices were then directed, and the arm supported in a sling.

Since that time the disease has gone on increasing, the interarticular cartilages have been destroyed, and the articular surfaces of the bones become diseased. As the patient's condition was good, Dr. Whaley proposed to exsect the joint as the only means of removing the disease, and the only operation which would give him the use of the arm.

Accordingly, on the 5th of January, the operation was performed in the usual manner by making a straight incision over the posterior surface of the joint, turning out the bones and removing the diseased portions. The tissues were much thickened and gelatinized, and the periosteum thickened and very vascular. The olecranon was found to be entirely diseased, the cartilage raised off from it and the apophysis entirely separated. The central portion of the head of the radius was also denuded of its investing cartilage. The anterior portion of the articular surface of the humerus was in a like condition. The whole synovial membrane, under inflammatory action, had undergone transformation, being thickened, softened, and degenerated.

After the operation, the arm was laid on a pillow and cold-water applications made to the wound. From this time forward, everything went on favorably. The wound granulated finely, the boy's appetite and strength increased, and by the 1st of February he was discharged, the wound being nearly all healed.

In the course of a week or two, it healed entirely, and now the joint can be flexed and extended considerably, although, on account of his not attending regularly to the passive motion, he has not much voluntary action.

—o—

Trees may be pruned at any time, without danger, by simply covering the cut parts with shellac varnish.

Refined coal-oil is a solvent of gutta-percha and india-rubber.

Chemical researches by Mr. J. Salisbury, of Albany, show that good varieties of the apple are richer in those substances which strictly go to nourish the system than potatoes are; or, in other words, to form muscle, brain, and nerve.

EDITORIAL DEPARTMENT.

PERISCOPE.

CHLORATE OF POTASH.

This substance has come within a few years to be a medicine of first-rate importance. We have experienced great satisfaction in its effect upon aphthous stomatitis in children, ever since we read the recommendations of it by Dr. West in his lectures in the London *Medical Gazette*. It has also proved very valuable in our hands in some varieties of stomatitis in adults. And now within the last two years we have employed it in large doses in diphtheria.

"Chlorate of potash was originally employed as a medicine for supplying oxygen to the system, where a deficiency of that principle was supposed to exist." (Pereira's Materia Medica, 1849.) With this view it was employed at different times in a variety of diseases. Pereira considered that as it was found in the urine of persons who had taken it, it was proved to furnish no oxygen to the system. It is possible, nevertheless, that a portion of it may be decomposed. There are some cases that give color to the probability that it does furnish oxygen to the system under some circumstances, if not all. In some cases of dyspnœa, either from advanced phthisis or intense pulmonary congestion, great relief has been obtained by the use of large quantities of it. It has been inferred, and not unreasonably, that the effect was due to oxygen furnished to the blood by its decomposition.

Dr. Fountain, of Davenport, Iowa, believes that it has curative power in tuberculous affections. A paper which he read to the Section of Practical Medicine of the American Medical Association at the last annual meeting, designed to illustrate the effect which he claimed in several cases of phthisis, was hardly convincing, for want of sufficient details of the cases to allow the members who heard them to judge of the accuracy of the diagnosis. The spirit of the author of the paper was of the very best kind, and if the cases he presented were unconvincing in relation to the curative action of the chlorate of potash, there could be no doubt that he would either succeed in establishing its efficacy by future investigations, or would frankly and promptly acknowledge his faith in the medicine to be unfounded, as soon as he was satisfied with his trial.

No doubt, hundreds of practitioners will be (if we may be pardoned the vulgarism) "quacking it" with chlorate of potash in phthisis before a twelvemonth has passed, for which Dr. Fountain is not responsible, having unquestionably the best intentions. But let it be fairly tried, though it prove illusive to thousands of phthisical sufferers, before it is sent to the tomb of the Capulets, with the hypophosphites and all the other ignes fatui that have led so many up and down to leave them in despair at last.

In the *American Medical Monthly* for February, Dr. Fountain has published another paper on the subject. It is an interesting "Report of Cases of Phthisis, Scrofula, and other Diseases treated by the Chlorate of Potash." The cases establish the opinion that the medicine is a "tonic, alterative, and blood-depurant" of a high character, but fail to add any further evidence to the expectation of permanent relief in tuberculosis of the lung. In the cases of phthisis detailed, there was marked temporary improvement, such as follows cod-liver oil in very many cases, but no evidence of any superiority to that medicine. The subject deserves careful investigation, which Dr. Fountain indeed desires.

His paper is partly devoted to a defence against the objection which has been made to the medicine in question, that it is liable to derange the digestive organs and produce diarrhœa. He claims that all such effects are traceable to impurities in the drug, and instances some cases in support of his opinion. We can readily believe him to be correct in this; the demand of chlorate of potash is probably a hundred times as great in this country now as it was two years ago, and its adulteration having become profitable, it is more than probable that much of what is now sold is impure. Whatever may be its impurities or its adulterations, it is easy to understand that the digestive apparatus might be deranged by them, when we consider the large quantities in which it is administered. We have, ourselves, seen lately a dirty-looking specimen of it, very different in appearance from that we have been accustomed to use.

Dr. Fountain furnished last year sufficient evidence of its innocuousness when pure, in swallowing at a draught a solution containing an ounce of it, without experiencing any new sensations or discovering any medicinal results. And we may add our own testimony to its freedom from all bad effects in pretty full doses in various affections of children and adults.—*Berkshire Medical Journal.*

Dr. Fountain closes his article in the *American Medical Monthly* as follows:

"Believing the chlorate of potash to be a *tonic, alterative,* and *blood depurant,* superior in many respects to anything in our materia medica, I do not hesitate again to urge its claims upon the attention of the profession. From the time when, in 1851, I discovered its utility as a remedy for mercurial ptyalism, I have been testing its properties in many directions, and with constantly increasing confidence in its virtues, and (in the language of Dr. Hutchinson) "its scarcely less than wonderful power." I believe there is no tonic and alterative comparable to it in all manner of scrofulous diseases,

and every form of tuberculosis, in the sequelæ of the exanthemata, in adynamic fevers, and asthenic types of disease with depressed vital power, in every condition involving an imperfect aeration of the blood, and many derangements of the system resulting in abscesses, eruptions, ulcers, &c. In my opinion, it has this wide range in its application by reason of its *oxydizing* properties, in support of which I may have something to say hereafter."

REDUCTION OF HERNIA ASSISTED BY PLACING THE PATIENT ON HIS HEAD.

J. F., aged 49, was admitted into King's College Hospital, under the care of Mr. Bowman, January 9, 1861, at six A. M., with a large inguinal rupture on the right side. He stated that the hernia had existed twenty years, and that he had always worn a truss during the day. He said that two years ago the hernia came down, and not being able to reduce it himself, he applied at a London hospital, where taxis was applied, and at the end of an hour and a half was successful. The history of the present strangulation was that on waking at four A. M. he discovered that the rupture was down, and failing to reduce it himself after prolonged attempts, he at once proceeded, with great difficulty, to the hospital.

On admission, there was a large inguinal hernia of the right side, firm and irreducible. There was also a much smaller inguinal hernia on the left side. Taxis was immediately applied, first without and then with the aid of chloroform for about twenty minutes, but it was unavailing. He was then placed in bed, the thighs flexed, and a bladder of ice applied over the swelling.

At nine A. M. Mr. Bowman saw the patient. He had vomited bilious fluid, and was shivering violently, with great anxiety of countenance. The swelling was somewhat more tense, and apparently not yielding the least to attempts at taxis when the patient was on his back with his thighs flexed. It seemed advisable to proceed at once to an operation; but, before doing so, Mr. Bowman determined to try the plan lately advocated, viz: placing the patient on his head and shoulders, the pelvis being raised and in a vertical position. The tumor had not been compressed between the hands for more than half a minute, before a portion of gut suddenly receded, reducing the tumor to three-quarters of its bulk; but, although further attempts to reduce it were continued three or four minutes longer, they failed while he was in this position. It was, however, completely reduced soon after, by the ordinary method of taxis.—*Med. News.*

ON THE THERAPEUTICAL METHODS OF PREVENTING PITTING OF THE FACE IN CONFLUENT SMALL-POX.

During the last five years Dr. Stokes has employed gutta percha and collodion in a considerable number of cases of confluent small-pox, for the purpose of preventing pitting of the face. In most of the cases the crust came off in large flakes or patches, composed of the dried exudations and the covering material, leaving the skin uninjured. This kind of treatment was most adapted to those presenting a more sthenic type. Dr. Stokes considers that the application of poultices over the face is the surest method of preventing disfigurement in small-pox. Their use should be commenced at the earliest period, and continued to an advanced stage of the disease. In most cases they may be applied even over the nose, so as to cover the nostrils. The plan should fulfil three important indications of treatment—namely, to exclude air, to moderate the local irritation, and to keep the parts in a permanently moist state, so as to prevent the drying and hardening of the scabs. The best poultice is formed of linseed meal, which should be spread on a soft material, such as French wadding, and covered with gutta percha paper or oiled silk. The conclusions to which Dr. Stokes arrives are the following: 1. That the chances of marking are much greater in the sthenic or inflammatory than in the asthenic or typhoid confluent small-pox. 2. That, considering the change in the character of the disease observed during late years, we may explain the greater frequency of marking in former times. 3. That in the typhoid forms of the disease the treatment of the surface by an artificial covering, such as gutta percha or glycerine, will often prove satisfactory. 4. That in the more active or non-typhoid forms the use of constant poulticing, and of every other method which will lessen local inflammation, seems to be the best mode of preventing disfigurement of the face.—*Dub. Quar. Jour. Med. Sci. and Nashville Journal.*

NEW EXPERIMENTS REGARDING THE ORIGIN OF COW-POX.

The opinion of Jenner regarding the origin of vaccinia, alternately supported and contradicted by various observations, is at present, at Toulouse, being tested by new experiments, of which Dr. A. Fontan has given the following account, dated Toulouse, 24th May, 1860:

"A happy accident occasioned my passing through Toulouse at a time when a question of the highest importance was being submitted to experiment, I mean the question of the origin of vaccinia. The following is an abstract of the principal facts: Some weeks ago, M. Sarrans, of Rieumes, observed that several mares brought back to his establishment for the se-

cond or third time, were affected with the *grease* (*eaux-aux-jambes.*) There was a sort of epidemic of the affection, for nearly a hundred horses were found to be suffering from it. The variety of grease was the pustular form.

"One of these mares was taken to Toulouse to the veterinary school, where the learned Professor, M. Lafosse, soon recognized the true character of the epidemic. He inoculated with some of the matter of these pustules the teat of a cow, in the presence of his assistant and numerous pupils. Soon afterwards fine pustules made their appearance on the udder of the cow. One of the most distinguished physicians of Toulouse, Dr. Cayrel, the official vaccinator of Toulouse, vaccinated, with matter from the pustules of the cow, several infants who had never been vaccinated. Well characterized vaccine vesicles followed, presenting their pearly aspect, central depression, and rose-colored areola, increasing in size from day to day without any trace of erysipelatous inflammation.

"A second cow was vaccinated with matter from the first cow, and infants were vaccinated with matter from the second cow; the results were equally satisfactory, as in the former case. At present they have arrived at the fourth vaccination from the first cow, and at the third from the second cow. I was present at this vaccination; the vesicles were very fine. One was photographed in my presence, with a tolerably satisfactory result. The vesicle presented the most characteristic appearance of vaccinia. When pricked, no purulent matter escaped, but gradually a serous fluid oozed out in great abundance, with which several infants were vaccinated.

"The new matter is very active, and succeeded in the case of a pupil of the veterinary school, vaccinated in infancy, and in whom all attempts at revaccination had failed. I saw a vesicle in an infant, produced by the virus of this pupil, finer and more developed than three other vesicles produced by an ordinary vaccination in the same infant. (No doubt the two vaccinations were performed simultaneously.)

"Already thirty infants have been vaccinated at Toulouse. No unpleasant symptoms have manifested themselves in any case; and in all, the result has been most satisfactory.

"Dr. Izarié, formerly vaccinator in Paris, considered the vesicles so good, that he had his son vaccinated this morning with virus from one of the infants.

"An official commission has been named by the Prefect to carry out these experiments. A report will be drawn up and communicated in due time."—*Edin. Med. Journ. and Nashville Journal.*

Ether, whose boiling point is 100 deg., and which almost boils with the heat of the hand, cannot be induced to rise above 95 degrees.

GLYCERIN.

The following, which we take from the *Chemist and Druggist*, though containing nothing new, is an excellent brief summary of many of the important uses to which this remarkable substance may be put:

"Doctors differ respecting the effects of this substance on the system when taken internally, but they agree in regarding it as a valuable *excipient*—an excipient which appears to hold a place between water and oil, for it participates in most of the qualities of both. Glycerin unites as well with aqueous and alcoholic liquids as it does with lard, ointments, pomades, and soaps. It may be used as a base for liniments, and may be added to extracts, tinctures, and medicinal wines. When mixed with any active medicinal agent, its lenitive sedative properties may prepare the tissues, by softening them, for the absorption of the medicinal substance. Glycerin has been tried as a substitute for cod-liver oil in phthisis, but the opinions of medical men as to its efficacy as a remedy in this disease are divided. Dr. Cotton, Physician to the Brompton Hospital for Consumption, says that it will bear no comparison to cod-liver oil. Nitro-glycerin, or Glonoine, formed by the action of nitric and sulphuric acid, is a terrible poison, half a drop being sufficient to produce death; this peculiar compound, so unlike the harmless inert substance from which it is produced, is administered in exceedingly minute doses by homœopathic practitioners as a remedy for nervous affections. As an external application in disease of the skin glycerin is justly prized. Mr. Startin states that he has employed it in some 15,000 cases at the hospital under his care, and has found it a most useful *palliative*. In diseases of the ear this substance has been employed with good results. In the treatment of some diseases incidental to the organ of vision, a mixture of glycerin and extract of belladonna is used to dilate the pupil; the glycerin does not effect this object, but it keeps the skin soft and pliable while the belladonna does its work. Applied to burns or other wounds it keeps them from the air, and maintains the suppleness of their edges. When added to cataplasms, it preserves their softness, and what is very important, it prevents them adhering by their edges to the surfaces on which they are placed.

NITRATE OF SILVER IN OBSTINATE VOMITING.

A Cincinnati subscriber writes to us as follows:—"In the Reporter for March 2d, under the title of 'Obstinate Vomiting,' nitrate of silver is not mentioned in the treatment. Given in one-third grain doses, in the form of pill, combined with small portions of morphia, I have never known it to fail in any instance."

REVIEWS AND BOOK NOTICES.

Lives of Eminent American Physicians and Surgeons of the Nineteenth Century. Edited by Samuel D. Gross, M.D., Professor of Surgery in the Jefferson College of Philadelphia. Philadelphia: Lindsay & Blakiston, 1861. Pp. 836.

The task which the distinguished editor has, in this work, imposed upon himself, has certainly been an agreeable labor, and perhaps a mental relief after his years of toilsome delving in the heavier literature of science. He says that it was a labor of love; and we know of no labor which should be more to the heart of one who has reached an eminent position than that of retracing and refreshening the footprints of the great and good of the profession who have passed away. Every age needs its Old Mortality, who shall chisel afresh the time-worn records of departed greatness. The past grows shadowy and memory's outline becomes blurred, and the dust of years tinges all with the same sombre hue. In this work are reawakened to the surviving friends the memories of those who made the American medical profession what it now is, and will bring familiarly to the generation now stepping on the stage the lives of those whose names are household words in the school of medical science.

To two of the former class, "representative physicians of an age now passing away," the elegant volume is dedicated; to Samuel Jackson, M.D., of Philadelphia, formerly of Northumberland, and John W. Francis, M.D., of New York. To Dr. Jackson, who now, in a green old age, and after a long life of usefulness, can look back through the vista of years which the work opens to him, this dedication must be particularly grateful. To the latter veteran, it was the last distinction offered to him; for, soon after the volume came from the press, he, too, was gathered in, and leaves a memory well worthy of the immortal conservation of the biographer.

This volume being really the first systematic work of the kind, may be said to be the first instituting of medical biography in our literature. Such a work in the present high status of the profession in this country cannot be ephemeral, and must be appreciated. The tyro thinks but little of the past; but when years of toil, and perhaps disappointment, have sobered his starting enthusiasm, and he looks about for some real object as the end of professional life, he naturally turns, for example and consolation, to the lives of those who have gone before him in the race.

Thirty-two distinct biographies are given, and include, chronologically arranged, those of Rush, Warren, Wistar, Dorsey, Bard, McDonell, Brown, Godman, Mitchill, Hosack, James, Physick, Eberle, Macneven, Thacher, McClellan, Randolph, Brigham, Luzenberg, Hartshorne, Morton, Beck, Drake, Chapman, Beck, Horner, Swett, Bartlett, Stillé, Beck, Warren, and Frick.

Three of these are by the editor, and the others are by personal friends of the deceased, or those intimately acquainted with their career, or by their sons. The editor remarks that "a book of biography, constructed upon such a plan, must, it is evident, possess superior claims to attention, since, from its very nature, it will be more likely to insure a just delineation of character than if it were the offspring of a single individual."

This variety of authorship seems to increase the spirit of the work, and the biographies being, indeed, all excellent as literary productions, we think that it will be not only to the medical profession, but to the whole reading community, an exceedingly interesting book.

It is proposed, should the present volume meet with sufficient encouragement, to issue another which shall contain the biographies of Miller, Caldwell, Beaumont, Davidge, De Butts, Harrison, Rodgers, Dewees, Post, Power, Williams, Mitchell, Mütter, Bellinger, and others.

The Transactions of the American Medical Association, instituted in 1847. Volume xiii. Philadelphia: printed for the Association, by Collins.

This ponderous volume of 930 pages gives very satisfactory evidence of the activity and vitality of our National Medical organization. It contains the proceedings of the meeting at New Haven last June, and may be divided into—1. Address and Reports of Officers of the Association; 2. Reports of Sections; 3. Reports of Standing Committees; and, 4. Special Reports.

Three of the six sections into which the Association is divided, seem to have had business of sufficient importance before them to report, viz: the sections on Meteorology, Medical Topography and Epidemic Diseases, the Surgical sections, and the section on Practical Medicine and Obstetrics.

Two elaborate and very valuable reports were presented to the first-named section, on the Medical Topography and Epidemics of the States of New York and North Carolina, by Dr. Joseph M. Smith, of the former, and Dr. James H. Dickson, of the latter State. The historical value of such reports as these is beyond estimate. The names of their authors are a guarantee of the ability with which they are drawn up.

The Surgical section produced three papers. Two of these, the Report on the various Surgical Operations for Defective Vision, by Dr. M. A. Pallen, of St. Louis, and the Report on Morbus Coxarius or Hip Disease, by Dr. Lewis A. Sayre, of New York, are very valuable papers. In his report, Dr. Sayre gives a tabular statement of 110 cases of resection of the head of the femur, for caries. Of these, 36 died, 2 re-

sulted unfavorably, and 72 recovered with more or less useful joints.

Among the special reports is a lengthy and very interesting one by Dr. H. P. Ayres, of Fort Wayne, Indiana. "On the Education of Imbecile and Idiotic Children." There is much in this report to encourage our profession to persevere in their efforts to rouse the public to the importance of making provision for the education and training of a hitherto much neglected class of the unfortunates of the human race. The field seemed very unpromising at first, but the philanthropy and genius of Séguin, Howe, Wilbur, and others, has demonstrated that the soil is not incapable of productiveness.

The report of Dr. C. C. Cox, of Maryland, on American Medical Necrology, is an interesting feature in this volume, and we hope that it will be kept up from year to year.

This volume would be a valuable addition to the library of any physician. A remittance of three dollars to Dr. C. Wister, of this city, the Treasurer of the Association, will secure a copy.

Diphtheria, its Nature and Treatment; with an Account of the History of its Prevalence in various Countries. By Daniel Denison Slade, A.M. Philadelphia, 1861: Blanchard and Lea. Pp. 85.

This is the dissertation to which the Fiske Fund Prize was awarded July 11th, 1860.

The writer supposes that the history of the affection can be carried back almost to the time of Homer. He mentions the description of a malignant sore-throat by Aretæus, characterized by ulceration, fetid breath, and dyspnœa.

Macrobius speaks of a similar epidemic at Rome, A. D. 380. A fatal epidemic of sore throat occurred in Holland in 1337, and again in 1519, and in 1557, which last spread to other parts of Europe. In 1576 it appeared in Paris, assuming a very malignant form. Early in the 17th century it occurred in Spain, being called "garotillo," from the death by strangulation, and was described by Mercatus, Villareal, Nunez, and others.

In 1618 it appeared at Naples, and continued for some twenty years, being described by several writers.

The next account of it was in 1743, when it again prevailed in Paris until 1748, which epidemic is described by Malouin and Chomel.

At the same time it occurred in England, and at Cremona, as seen by the accounts of Fothergill, Starr, and Ghisi.

Huxham described it, in 1757, prevailing in England; Rosen, in 1761, in Sweden; Dr. Samuel Bard as it occurred in New York in 1775.

Then the subject dropped until revived in 1825 by Bretonneau, whose treatise is the first practical research on the subject. Since then it has been described at various times in various places by a number of writers.

Bretonneau, with nearly all the French writers, regard diphtheria as identical with croup; others consider it identical with scarlatina, in which the throat affection is unaccompanied by the usual eruption.

After presenting descriptions of the disease and the opinions of authors, Dr. Slade thus sums up:

Diphtheria is a *specific* disease, as shown by its origin, progress, manner of termination, and sequelæ.

Its diagnostic sign is the formation of an aplastic, membranous exudation upon any portion of the cutaneous or mucous surface, which is exposed to the contact of the atmosphere.

It is propagated by infection and contagion, and is both epidemic and sporadic in its invasion.

Its characters plainly indicate that it belongs to the category of *blood diseases*.

It is not allied either to cynanche trachealis, or to scarlatina.

The treatment is to be directed to the control of the exudation, and to the support of the constitution by means of tonics, stimulants, and by a nutritious diet.

Treatment.—Mercury and depletion are contra-indicated by the asthenic nature of the disease.

Strict attention to hygienic rules is indispensable.

In the early stage of heat and engorgement about the throat, local applications of cold and compresses. Later in the disease, fomentations and emolient applications generally. Blisters add to the engorgement and cellular infiltration, and afford surfaces for the diphtheritic deposit, therefore, are to be avoided.

In the general treatment, emetics of ipecac. if there be early tendency to croupal symptoms.

The bowels may be moved by enemata, or mild laxatives, the asthenic nature of the disease prohibiting the abuse of purgatives.

Internal tonics, which may be quinine, muriated tincture of iron, or chlorate of potash; the object being to sustain strength, it is immaterial what means are employed, so that they are competent to this end, but the author seems to favor tr. ferri chloridi, the dose being 10 to 15 drops, in water, every three or four hours.

If necessary, injections of beef tea, with brandy and quinine.

The author does not recommend the local application to the fauces of nitrate of silver, except early in the disease, when it may check further exudation.

He prefers the tr. ferri chloridi, applied by means of a brush or sponge, or in a gargle—ƒʒij to aqua ƒʒviij.

Hydrochloric acid is sometimes useful, honey being added to it for children, which is the favorite topical remedy of Bretonneau. Many other gargles have been employed. Where there is much tonsilitis, inhalation of steam,

mucilaginous gargles, fomentations, etc., often afford marked relief.

Ablation of the tonsils is unadvisable, because the exudation will re-form, and there is great risk of severe hemorrhage, and it is only admissible in an adult to facilitate respiration when there is great tumefaction.

If the nasal fossæ are implicated, injections of solution of chloride of soda in water, with the addition of glycerine. Warm water and soap should be frequently thrown up for purposes of cleanliness, and any solution applicable to the fauces may be injected if called for.

With regard to tracheotomy, it is a resource bound to be employed in view of apparent certain death, and even when such cases terminate fatally the operation will render the last moments of life less distressing. The canula should not be too small.

After such an operation, the same therapeutical treatment before described and advised should be persisted in; and, in these cases, injections of nitrate of silver into the trachea is strongly advocated.

The work before us exhausts the subject to a sufficient extent, and presents the profession with a succinct account, with all the various details of its history, pathology, and treatment, as expressed by various authors.

Anything we could say in commendation of the plan of the work, and the literary and other ability displayed in treating the subject, could hardly add to the distinction it has already received from the trustees of the Fiske Fund.

THE MEDICAL AND SURGICAL REPORTER.

PHILADELPHIA, SATURDAY, MARCH 16, 1861.

HAS DEATH EVER BEEN PRODUCED BY INHALATION OF SULPHURIC ETHER?

The circular of the Boston Society for Medical Improvement, which is appended, has for its object the determining the absolute safety of ether, which is claimed by some, or of showing that its administration has not an entire immunity from danger.

Cases of death from the immediate effects of the anæsthetic inhalation of ether, are generally believed to have, in a few instances, occurred, and some statistics of deaths from anæsthetics include such cases; but the actual records of instances in which death is clearly attributable to the inhalation are not to be found.

It may have been difficult, in some instances, to decide whether a death, whilst under the influence of ether, was owing to the anæsthetic or to causes preëxistent or unconnected with its administration. Ether has, perhaps, often been given to sufferers in an extreme condition, or even in *articulo mortis*, and the anæsthetic sleep been quietly merged into the sleep of death, without the termination having been at all hastened by the inhalation. Its use, in producing euthanasia may have caused death to be attributed to it. In a recent case, in this city, in which respiration for a time ceased and death seemed imminent, whilst a patient was fully etherized, some substance which had regurgitated from the stomach and apparently entered the larynx, was fortunately expelled by a violent succussion of the chest, and at once all was right again. If, in this case, death had actually occurred, it would certainly have been attributed directly to the anæsthetic, unless an autopsy had revealed the real immediate cause.

The continued occurrence of deaths from chloroform, which are now counted by hundreds, has shaken confidence in it as an anæsthetic for general use, and renewed the interest in sulphuric ether. This mortality is admitted to be uncontrollable; it has occurred whilst the chloroform was administered by the ablest and most cautious surgeons, and some of the most vigorous patients have expired after drawing but a few breaths of the vapor. No surgeon can operate with ease and confidence whilst he knows that he is liable, during an operation, to be startled by seeing his patient's face blanched with a deathly pallor, his chest collapse, and respiration cease.

The object of the circular of the Boston Society is a good one. If ether is amenable to the same fatal accidents as chloroform is, it is well for us to know it. If, in the innumerable instances of its use, careful or reckless, in old or young, and in every condition of the human system, it has destroyed no life, let it have its credit as a priceless blessing, and let the fact be proclaimed.

An impression prevails among the public that anæsthesia is dangerous, and patients occasionally prefer to suffer rather than incur the supposed risk. If the absolute safety of sul-

phuric ether can be asserted, this fear will soon be dispelled.

A showing of the safety of anæsthesia by ether may be the cause of saving many lives. In Europe, before the use of ether became general, chloroform was announced from high authority as its superior, and the attractiveness and convenience of the new anæsthetic spread it rapidly in favor. In this country, chloroform has never been generally adopted, and the last few years have seen its use, as a general anæsthetic, rapidly declining. In Europe, its use soon became almost universal, and there the American discovery of anæsthesia by inhalation seems eclipsed and forgotten in the Scotch suggestion of chloroform. But the use of chloroform has met with a check which will not be removed until more of its physiological action is known, and the mystery of its appalling fatality comprehended and controlled.

A mixture of ether and chloroform, as first used and recommended by Dr. Henry H. Smith, is increasing in favor in this city, and has thus far seemed safe. It would be well to know whether, with the apparent advantages of this mixture, safety can be insured, and the queries of the Boston Society include ether in whatever way combined.

It is hoped that the circular will be replied to by all who are cognizant of cases in which death has been attributed to the inhalation of sulphuric ether.

Boston, Massachusetts, U. S.

The question of the entire immunity from danger which is claimed for anæsthesia produced by ether, being still under discussion, the Boston Society for Medical Improvement has appointed the undersigned a committee "to investigate the alleged deaths from the inhalation of *sulphuric ether*, and to report thereon."

They would, therefore, request the medical profession, or any person into whose hands this may fall, to communicate to either of them such cases, coming within their own observation, as shall serve to this end, giving the place, time, and circumstances of their occurrence, with the mode of inhalation adopted, and especially information in regard to the following points:

1st. *The kind of ether used, whether pure sulphuric ether, chloric ether, or ether combined with chloroform.*

2d. *The period after inhalation at which death occurred.*

Also, any other facts which may enable them to form an opinion on the subject of their investigations.

Richard M. Hodges, M. D.,
George Hayward, M. D.,
Solomon D. Townsend, M. D.,
Charles T. Jackson, M. D.,
J. Baxter Upham, M. D.

February, 1861.

Correspondence.

MASSACHUSETTS CORRESPONDENCE.

Boston, March 8, 1861.

Messrs. Editors:—The Annual Commencement of the Massachusetts Medical College occurred on Wednesday last, at the College in North Grove street. The exercises were satisfactorily conducted, and reflected great credit on those participating. They were in the following order:

Prayer, by Prof. A. P. Peabody, D.D.

Dissertations selected for public reading:

1. Hospitals—Francis Henry Brown, Boston.
2. Scarlatina—William Caldwell Flowers, Halifax, N. S.
3. Pleurisy—William Henry Weed Hinds, Tewksbury.
4. Insanity—Francis Le Baron Monroe, Medway.
5. L'Homme—considéré sous le rapport du Physique et du Morale—Norbert Provencher, Worcester.
6. Anæmia and Chlorosis—William Edmond Rice, Boston.
7. Transfusion of Blood—Theron Woolverton, Grimsby, C. W.

Conferring of Medical Degrees by the President of the University.

Address by Prof. George C. Shattuck.

The members of the graduating class, the present year, were forty-nine in number.

Among the distinguished gentlemen present, were Gov. Andrews, Ex-Gov. Washburne, and Ex-Gov. Clifford.

The exercises were concluded by an address to the students by Prof. George C. Shattuck, who spoke first of the work which had been performed during the year, of the manner in which it had been done; and, secondly, a word of exhortation and counsel to the young men who had just graduated.

Prior to the exercises, the Overseers of Harvard University held a meeting, and appointed the following gentlemen a committee for visiting the Scientific School:—Winslow Lewis, M.D., Emory Washburn, LL.D., Nathaniel B. Shurtleff, M. D., Hon. John H. Clifford,

LL.D., Jacob Bigelow, LL.D., James Hayward, Esq., John M. Fessenden, Esq., Ezra Lincoln, Esq., Capt. B. S. Alexander, U. S. A., George H. Gay, M. D., Samuel Cabot, Jr., M.D., James R. Wellman, M. D. M.

Boston, March 11, 1861.

Messrs. Editors:—The report of the Board of Trustees of the Massachusetts General Hospital for the year 1860, has just been published, together with a detailed report of the resident physician of the hospital and the superintendent of the McLean Insane Asylum. The expenses for the year have been $42,578 39 for the hospital department, and $67,750 77 for the asylum; total, $110,329 16. The total receipts are:—For the asylum, for board of patients, $62,712 67; from farm, $2,312 54; from "fund to aid indigent insane," $4,123 23. For the hospital, board for patients, $5,209 85; income from "fund to support free beds," $14,167 37; from subscription for free beds, $3,024; from the Massachusetts Hospital Life Insurance Company, one-third of the annual division of profits, $5,000; one-third of extra division of profits for five years, $15,000; from all other sources, $3,346 33; total, $114,896—leaving a surplus of $4,567 84. There would, however, have been a deficit if there had not been an extra dividend of the Insurance Company.

The free patients treated at the hospital were 1,137; for an aggregate of 5,585, at an expense of $36,148; income from endowments and subscriptions to support free beds, $17,192 37—leaving $18,955 69 to be charged to the general fund of the corporation. The average cost of each patient at the hospital was $6 42 per week; at the asylum, $6 68 per week.

The property of the corporation, January 1, 1861, was land and buildings of the asylum, $317,862 35; of hospital, $289,209 99; stocks, bonds, &c., which are productive, $258,330 36. The funds which are included in the last item are these:—"To support free beds at the hospital," $183,747 48; library, $6,000; for indigent insane, $50,520.

The hospital has never been filled. The greatest number ever admitted in one year was 1,240. In case of need, however, the number might be increased to 1,700, if the income was as large as the expense.

During the year, 1,240 patients were admitted to the hospital, 698 were discharged well, 305 relieved, 78 not relieved, 39 not treated, and 121 died. Whole number treated, 1,394; under treatment, December 31, 136.

Dr. S. L. Abbott, physician to "out-patients," has attended 4,271 patients during the year.

The library (known as the Treadwell Library) is in good condition. It contains 2,534 volumes, which are very valuable for consultation to the profession generally.

The asylum was opened October 6, 1818. Up to December 31, 1860, there had been admitted to it 4,702 insane persons, of whom 2,169 have been discharged cured, 1,729 much improved, and 569 have died.

The hospital was opened September 3, 1821. Up to the same date, there had been admitted 23,351 patients, 11,225 of whom have been discharged cured, 6,493 relieved, 194 not relieved, 984 not treated, and 2,237 died; to which may be added 15,715 patients (outside) who have received advice and treatment during that time.

No suitable applicant was refused admission to the hospital last year. The number of applicants refused was 257. The hospital is capable of accommodating 180 patients. The largest number that have ever been in the hospital at any one time was 175.

During the year, an additional legacy of $10,000 has been received to the "free bed fund" from the estate of Jonathan Phillips. William J. Bowditch, Esq., gave the amount of his bills for professional services, $274 25.

The trustees have bought five acres of land adjoining the grounds of the asylum, and they say that a new cottage there for female patients has become a necessity, and it will probably be built this year. The bad atmosphere caused by the "filling up" of flats near the hospital grounds was very offensive at times during the year.

During the year, there were admitted to the asylum 121 patients, of whom 39 were discharged cured, 17 much improved, 20 improved, 9 not improved, and 20 died. Whole number under treatment at the close of the year, 189.

I shall give you an abstract of the detailed reports of the physician and superintendent in my next. They are of full interest.

Diphtheria and Scarlatina.

Two cases of diphtheria, resulting in paralysis of the lower extremities, are reported in Essex. Both persons are unable to walk, or even stand on the floor.

Scarlatina has made its appearance in the country. In Natick there have been three deaths in one family, and three other members of the same family have the disease.

Dr. J. P. Hodgdon, of this city, died on Tuesday night last of diphtheria, after an illness of six days. It seems that the doctor had been treating, some three weeks since, two sisters who died of diphtheria. A brother of the deceased took the disease while attending upon the sisters, but was successfully treated by Dr. Hodgdon and is now in good health.

A good "motion!"

A motion was lately made in the Senate to adopt an order for the repeal of a portion of the general statutes so as to except one horse, owned by any physician, from taxation, which was lost by a vote of 12 to 18. The New Bed-

ford paper remarks:—"The vote shows what proportion of our people fairly appreciate the labors and services of a hard-working doctor."

THE BEARD QUESTION.

I came across the following article in one of our daily papers the other day, and having seen so much in your journal on the "*beard question*," I thought I would place it before your readers.

The Throats of the Clergy.—A correspondent of the London *Times* writes:—"Medical men recommend all public speakers who have a tendency to 'relaxed uvula,' 'clergymen's sore throat,' or 'aphonia clericorum,' to let the beard grow under the chin, and I cannot recall any one case of this complaint where this treatment was adopted, while all which I remember happened to clergymen either beardless or shaven under the chin. Again, when the exposure to wind and weather, to which the active clergyman submits in the discharge of his duties, day and night, is taken into consideration, I think no reasonable man or woman can refuse us the use of the protection which Providence has given us. The parson in the Yorkshire moors, the eastern county fens—loved home of piercing east winds—the woods of Gloucestershire, or the chalky hills of the Southdowns, as he wends his way through lanes bounded by hedges no thicker than tooth brushes, or over country with no hedges at all, is victimizing himself, not to do his duty, but to the absurdities of fashion, and brings on himself all sorts of thoracic and pectoral woes every time he shaves. Possibly the Bishop of Rochester thinks a woolen comforter a sufficient substitute for nature's own covering; but the fact is that more colds are caught with a comforter than without. It chafes, and so produces an artificial heat, and often a great perspiration, and then a draught or chill comes, or the comforter gets loose, and a cold follows; while, if the mouth is covered, the breath is driven inward and dampens the neckcloth, and so we get a sore throat. I heard from a laboring man, a week ago, a striking argument in favor of beards. He used to spit blood, and was in a bad state of pulmonary disease. Last spring he ceased to shave; since then he has not only not spit blood but gained over thirty pounds of flesh in weight. How many consumptive clergymen might now be strong and useful if they had had equal wisdom!"

It seems they are discussing the *beard question* in Old England.

Mortality of the Week.—The number of deaths reported for the week is 74, the same number as last week—phthisis, 14; small-pox, 1; diphtheria, 3; brain disease, 6; lung diseases, 5; liver complaints, 3.

Sixteen of the deaths were children under one year of age, and 31 under five years. Three were over 80 and one over 90. Twenty-nine were Americans and 45 were foreigners. Seventy-two were white and two colored.

City Institutions, 0; Massachusetts Hospital, 1; Rainsford Island Hospital, 3. M.

Philadelphia, March 14th, 1861.

Messrs. Editors:—"A Good Site," noticed in your last number, indicates that a Presbyterian Doctor will meet a welcome reception, and have an opportunity of doing a *site of good* in Corsica; but will your Mr. Kelly, or Mr. Rodgers, inform us whether a *poor sinner* of a Doctor, one who has had a *large experience* with the world, and would have no objection to relate it before the elders of the church, and who desires to retire to a *small* living—whether such an one would have any chance of success in the village of Corsica of one hundred and fifty inhabitants? As his chief object is a *living*, he would be willing, professedly at least, to *die* to the world, and join the Presbyterian Church, if he can secure the patronage of its *three hundred members of the congregation!*

As it is only necessary in order to obtain this valuable opening to be "a physician of some experience," and withal a Presbyterian by membership, I presume it is a matter of indifference as to what school of medicine the applicant hails from, or whether any school at all.

I would beg leave, however, to inquire further, before I venture to accept, if the "good office and dwelling," which "can be had on reasonable terms," belongs to a member of the Presbyterian Church, and if so, what are the terms to a *stranger*, whom the Church would be willing to *take in*, provided he would accept this very *desirable place*.

An early answer is solicited before I make up my mind to join the Episcopalians or Catholics.

Yours, &c., Wide-Awake Doctor.

NEWS AND MISCELLANY.

Sudden Whitening of the Hair.—The question of the sudden whitening of the hair is a disputed one, notwithstanding the numerous facts said to be attested in the affirmative. Physiologists, generally, incline to a belief in the sudden change of color; and many curious theories are adduced to account for it.

We have sometimes seen the hair on patient's heads totally change in color, near to the roots, at least, from a black to a silvery white, or even to a brickdust red, but our credulity has been spared a stretch by detecting the previous customary use of *hair-dye*, and supposing that during an illness its use was not very convenient. This is, we are aware, spoiling the poetry of the

transition, and we would not thus accuse the Prisoner of Chillon, who said:

"My hair is gray, but not with years,
Nor grew it white in a single night,
As men's have grown from sudden fears."

But our unpoetical theory would not account for the change as rapidly as Scott says it can take place:

"Danger, long travail, want and woe,
Soon change the form that best we know;
For deadly fear can time outgo,
And blanch *at once* the hair."

The best authenticated instance of sudden whitening of the hair is the following, which has recently appeared:

"A correspondent of the London *Medical Times* having asked for authentic instances of the hair becoming gray within one night, Mr. D. P. Parry, Staff Surgeon at Aldershott, writes the following very remarkable account of a case of which he made a memorandum shortly after the occurrence:—'On Friday, February 19, 1859, the column under Gen. Franks, in the south of Oude, was engaged with a rebel force at the village of Chamba, and several prisoners were taken; one of them a Sepoy of the Bengal army, was brought before the authorities for examination, and I, being present, had an opportunity of watching from the commencement, the fact that I am about to record. Divested of his uniform, and stripped completely naked, he was surrounded by the soldiers, and then first apparently became alive to the danger of his position; he trembled violently, intense horror and despair were depicted on his countenance, and although he answered the questions addressed to him he seemed almost stupefied with fear. While actually under observation, within the space of half an hour, his hair became gray on every portion of his head, it having been, when first seen by us, the glossy black of the Bengalee, aged about 54. The attention of the bystanders was first attracted by the sergeant, whose prisoner he was, exclaiming, 'He is turning gray,' and I, with several other prisoners, watched its progress. Gradually, but decidedly, the change went on, and a uniform grayish color was completed within the time named."'

Physicians in the United States.—According to the Nashville *Medical Journal*, the number of physicians in the United States, amounts to 40,481. In Massachusetts there is one physician to 605 inhabitants; in New York, one to 611; in Pennsylvania, one to 561; in North Carolina, one to 802; in Ohio, one to 465; in Maine, one to 884; and in California, one to 860. These facts may be of interest to recent graduates.

Dr. Geo. S. Walker, of St. Louis, having become a homœopath, has been expelled from the St. Louis Medical Society.

The Chemist to his Love.

I love thee, Mary, and thou lovest me—
Our mutual flame is like th' affinity
That doth exist between two simple bodies;
I am potassium to thy oxygen.
'Tis little that the holy marriage vow
Shall shortly make us one. 'That unity
Is, after all, but metaphysical.
O, would that I, my Mary, were an acid,
A living acid; thou an alkali,
Endowed with human sense, that, brought together,
We both might coalesce into one salt,
One homogeneous crystal. Oh! that thou
Wert carbon, and myself were hydrogen;
We would unite to form olefiant gas,
Or common coal, or naphtha. Would to heaven
That I were phosphorous, and thou wert lime!
And we of lime composed a phosphuret.
I'd be content to be sulphuric acid,
So thou might be soda. In that case
We should be Glauber's salt. Wert thou magnesia
Instead, we'd form that named from Epsom.'
Couldst thou potassa be, I aquafortis,
Our happy union should that compound form,
Nitrate of potash—otherwise saltpetre.
And thus our several natures sweetly blent,
We'd live and love together, until death
Should decompose our fleshy *tertium quid*,
Leaving our souls to all eternity
Amalgamated. Sweet, thy name is Briggs,
And mine is Johnson. Wherefore should not we
Agree to form a Johnsonate of Briggs?
We will. The day, the happy day, is nigh
When Johnson shall with beauteous Briggs combine.

Punch, and Nashville Journal.

When Hannibal was engaged in his seige of Rome, the citizens, to show their sense of security against his assaults, and their contempt of his vain efforts, bought and sold the ground upon which his army was encamped, at or even above its previous rates in the market. So it is now with regard to the little grounds of truth upon which the many false systems of medical doctrine, which attempt the hopeless task of overturning legitimate medicine, are encamped. We shall not abandon those truths, but hold them in equally as high estimation as though they had never been defiled or dishonored by the footstep or grasp of any short-lived delusion, or evanescent cheat, clad in the attire of medicine.—*Chicago Med. Journal.*

Dr. P. Bryce, formerly Assistant Physician at the South Carolina State Asylum at Columbia, has been appointed Superintendent of the new Alabama State Hospital for the Insane, located at Tuscaloosa.

A Remarkable Surgical Case.—A Paris correspondent says that at a late meeting of the Academy of Medicine an extraordinary surgical case was related by M. Jobert de Lamballe, as having recently been treated by him at the Hotel Dieu, one of the public hospitals of Paris. During the war in the Crimea, a French soldier, serving in the trenches before Sebastopol, was struck by a Russian ball upon the *os frontis*, making a hole about the size of a franc piece. He fell immediately, and was taken to the hospital, where he remained for twenty-four hours in a condition of utter insensibility. A few days after, however, he returned to the trenches and finished the campaign, and came back to France at its conclusion. Since then, however, he has frequently found it necessary to go upon the sick list, complaining of pains in the head and vertigo—and there has been an almost continual suppuration around the fracture. Before his entering the Hotel Dieu, M. Jobert states that he suspected the presence of some foreign substance, and that upon sounding for it, he found the ball, and proposed to the patient to extract it, to which he willingly consented, and the ball was taken out, after having remained in his head twenty-nine months. The ball weighed twenty-five grammes, (a little less than an ounce,) and was found resting upon the *dura mater*, surrounded by a hard, blackened blood. It was flattened in some places, which gave reason to believe that it had made several *ricochets* before striking the soldier, which, of course, broke the force of it considerably. The operation has been a complete success. The patient is now in excellent general health, and no longer complains of the pains in the head, which have troubled him ever since he received the wound.

Dr. Cyrus Ramsey issues the following card:

To the Practicing Physicians of New York.—I purpose giving, for the benefit of the medical profession and others interested in sanitary science, the age, sex, and nativity of persons dying in this city, in 1861, from the most prevalent diseases, and, also, to give the number and street where such deaths occur—thus affording an opportunity to ascertain the portions most detrimental to health. In pursuing this laborious undertaking, I most respectfully ask physicians to be more definite in giving the number and street, particularly in the upper portion of the city, where the numbers run east and west. It frequently happens that the distinction of east and west is omitted on the certificate entirely, and hence mistakes follow. Some wards will show a greater mortality than justly belongs to them, and others less.

I perform this work in addition to the regular duties of my office, and therefore trust that my medical brethren will give me their assistance.

Cyrus Ramsey, M.D.,
Register of Records.

"Infamous Quackery."—Quackery loses none of its impudence. There is no class of men who exhibit such a fertility of expedients, involving such a total depravity of moral sense, as those who engage in the unholy business of manufacturing and making a market for quack medicines. Some time since we referred to the case in Williamsburg, New York, of a quack who, assuming the title of a minister of righteousness, actually publishes a *religious newspaper* with a name, (not his own,) with "D. D." appended to it as editor, who, in leading editorials, piously speaks of the benefactions conferred on the human race by a bountiful Providence in the shape of "Brother ———'s" wonderful medical discovery, while other portions of the quasi "religious" paper is filled up with selected religious articles!

In the *American Journal of Pharmacy*, the editor speaks, as follows, of a case which illustrates the infamous character of this class of men:

"It is said of some poisons, that when taken in an overdose, the emesis they excite proves the safety of the subject. So of quackery. In some of its forms it is so self-evidently false and disgusting that all reasonable persons will at once reject its assaults. Our attention was recently called by a friend to a handbill from a quack of this genus, purporting to be a "veil-Doctor," with astonishing natural powers. After various statements of his ability, he has the assurance to declare that he appeared before the National Medical Convention of 1860 at Washington, for the revision of the Pharmacopœia and demonstrated his remarkable powers. He then refers for information to a list of names of physicians and pharmaceutists of New York and Philadelphia, among the rest our own, who were there in attendance, and which he probably extracted from the preface of the U. S. Pharmacopœia. It need hardly be said that the whole affair is false, and that the use of names in this manner, for a false pretence, would subject the rascal to legal action under the proposed new law of Pennsylvania."

American Medical Association.—The fourteenth annual meeting of the American Medical Association will be held, in Metropolitan Hall, city of Chicago, commencing on the *first* Tuesday in June next.

Each regularly organized Medical Society is entitled to send one delegate for every ten of its members; and each Medical College is entitled to two delegates. It is desired that the names of delegates should be forwarded to the undersigned, as soon after their appointment as practicable.

H. A. Johnson,
Assistant Secretary.

Chicago, Feb. 1st, 1861.

Chemical History of a Candle.—A brief notice of the interesting course of lectures recently delivered by Professor Faraday, at the Royal Institution, will, doubtless, be acceptable to many readers of this journal. Though specially addressed to boys and girls, our great philosopher's exposition of the phenomena of a burning candle astonished and delighted "children of larger growth," even those familiar with the results of scientific research. In his first lecture Faraday thus defined the position which he intended to take throughout the course:—"Though our subject be so great, and our intention that of treating it honestly, philosophically, and seriously, yet I mean to pass away from all those here who are seniors. I claim the right of speaking to juvenile as a juvenile myself. I have done it on former occasions, and if you please I shall do it again. And though I know that I stand here with the knowledge of having the words I utter given to the world, yet that shall not deter me from speaking in the same familiar way to those whom I esteem nearest to me on this occasion." We sincerely hope that the Professor will for many years to come deign to play the part of a juvenile, and bring before the rising generation those grand truths of science which he has so materially helped to establish.

In our limited space we can only touch upon the chief phenomena of a burning candle, and describe a few of the ingenious experiments which the great master of chemical manipulation exhibited to his young friends. We shall treat the whole course as though it were one lecture, for the division of the subject into six parts could not render the notice more interesting, though it would necessarily increase its length.

What are candles made of? To enable his audience to answer this question, Faraday exhibited specimens of almost every variety of candle, from the splinter of candle-wood, taken out of the Irish bog, to the semi-transparent and delicately-tinted pillar of paraffin or stearine which is now used as a source of light. Some of these specimens attracted particular attention. There was a candle which had been obtained from the *Royal George*, and though it had been subjected to the action of salt water for many years, it still retained its light-giving properties. There were the miners' candles formerly used in coal-pits, some so small that sixty went to the pound. There were modern candles, beautifully shaped and colored; some of these were fluted pillars, others were ornamented with raised flowers, and those which depended upon color rather than form for beauty, were tinted with mauve, magenta, and all the chemical colors which have been recently introduced. Having explained the manufacture of candles, the lecturer lit one or two specimens, and called attention to the form of the flame, and to the beautiful cup filled with melted tallow beneath the flame. He showed that this cup was formed by a fine uniform ascending current of air upon all sides, which kept the exterior of the candle cool, and explained how the melted tallow got out of the cup up the wick into the place of combustion. As an illustration of the force which causes the tallow to ascend, he placed a column of salt on a plate, and poured into this plate a saturated solution of salt, colored blue, when the liquid at once commenced to creep up the salt, and eventually reached the top. Another simple illustration of the capillary attraction was afforded by a bit of cane, one end of which was dipped in camphine, and when the spirit had passed through the pores of the cane to the upper extremity, it was lighted there, and a sort of candle was formed. In examining the flame of the candle, the lecturer made use of the electric lamp to project its shadow on a screen, and thus exhibit the ascending current of hot air which drew out the flame, supplied it with oxygen, and cooled the sides of the cup of melted fluid. To prove that the flame was hollow, he introduced the extremity of a bent glass tube into the middle of it, and allowed the unconsumed vapor to pass through the tube into a flask. Having satisfactorily demonstrated the combustible nature of this vapor by applying a lighted taper to it, he arranged another tube in the flame, and succeeded in lighting the vapor which issued from the orifice of the tube, at a considerable distance from the flame. "Talk about laying on gas!" he said; "why we can actually lay on a candle!" The products of combustion were then touched upon by the lecturer. He showed that water was produced by the union of the oxygen of the air with the hydrogen of the flame, and carbonic acid gas by the oxidation of the carbon. The beautiful series of experiments with which he illustrated his observations on the composition of water and atmospheric air were so carefully arranged, that one seemed naturally to lead to the other, and the youngest philosopher who attended the course could not miss the thread of the delightful story of the candle. The heads of Faraday's discourse—the chapters, so to speak, of this wonderful story—may here be given, as they will enable the reader to form some idea of the greatness of the subject treated:—Candles, the materials of which they are composed and the process of manufacture. The Flame, its sources, structure, mobility, and brightness. Air necessary for combustion. Production of water during combustion. Nature of water. Hydrogen gas. Nature of the atmosphere. Nitrogen. Carbonic acid another product from the candle; its peculiar properties. Carbon or charcoal. Coal gas. Respiration and its analogy to the burning of a candle.

The Professor concluded his course with the following kind words addressed to his young friends: "All I can say to you at the end of these lectures is to express a wish that you may, in your generation, be fit to compare to a

candle; that you may, like it, shine as lights to those about; that, in all your actions, you may justify the beauty of the taper by making your deeds honorable and effectual in the discharge of your duty to your fellow-men."—*Chemist and Druggist, Feb. 15th.*

The examination of a quack doctor before an English court lately caused some amusement. The *Chemist and Druggist* says he stated in his evidence:—"The bottle produced is the one I gave to the deceased. The label upon it represents it to be 'concentrated decoction of red Jamaica sarsaparilla.' I never saw any but one kind of sarsaparilla. As to specifying it as 'red,' I bought the labels ready printed. The bottle does not contain one particle of sarsaparilla. It contains iodide of potassium, but in what proportion I cannot swear, as I did not weigh it. I just make it up, when wanted, by guess. I understand iodide of potassium is made from kelp, but I don't know whether it can be made from anything else or not. When administered it will make the nose run, but it won't make a sore leg run away. I think it was good for ulcers, such as those of the deceased; but I don't know why or wherefore."

Bœttger's Method of Bleaching Sponge.—The softest and cleanest sponges are selected, washed, and squeezed out repeatedly in water. They are plunged in dilute hydrochloric acid, (1 part of acid and 6 parts of water,) in order to separate the calcareous matters. This immersion is for one hour. They are then carefully washed, and plunged into a second bath of dilute hydrochloric acid, prepared as the first, except that there is added 6 per cent. of hyposulphite of soda dissolved in a little water. The sponges are suffered to remain in this bath for twenty-four hours. A final washing with water removes the chemical substances, and the sponges acquire by this method a beautiful whiteness.—*Rep. de Pharmacie.*

Pharmacy in Pompeii.—The excavations at Pompeii have just been recommenced; and we find it stated in the *Athenæum*, that amongst the first objects discovered were some jars and utensils of a druggist's shop.

Surgeon W. Sloan has been ordered to repair to Fort Columbus, and relieve Surgeon C. H. Lamb in his duties at that post; the latter, on being relieved, has been directed to report to the Surgeon-General for instructions.

Dr. Vermeule, of New Market, New Jersey, in a temporary fit of insanity committed suicide, recently, by throwing himself across the track of a railway.

Dr. Jenner has been appointed Physician Extraordinary to Queen Victoria, in place of the late Dr. Baly.

Commencement Exercises.—The Annual Commencement of the Jefferson Medical College took place on Saturday last. Hon. Edward King, LL.D., President of the institution, conferred the degree of Doctor of Medicine on 186 graduates. Of this number, 109 were from slave States, and 77 from free States.

Professor Dunglison, Dean of the Faculty, cordially congratulated the class on the distinction they had attained. The valedictory address was delivered by Prof. Thomas D. Mitchell.

The Jefferson College had 443 matriculants this year.

The Commencement exercises of the Medical Department of the University of Pennsylvania were held on Thursday of this week. The Chancellor, Rev. Dr. Goodwin, conferred the Degree of Doctor of Medicine on 175 graduates. Of these, 84 were from the free, 87 from the slave States, and 4 were from foreign countries.

The valedictory address was given by Prof. Rogers.

This department of the University had 465 matriculants.

It will be seen from the above, that in spite of the troublous times in the political and financial worlds, the great medical schools of this city have had a very successful season.

The Annual Commencement of the Philadelphia College of Pharmacy was held on Thursday evening. The degree of Graduate in Pharmacy was conferred on forty young men.

A Prolific Philosopher.—A French savant, named Tiraquea, is said to have given every year a child to his family and a book to the public. He had thirty children, was a native of Poitou, and one of the greatest men of his time.—*Nashville Journal.*

At the commencement of the St. Louis Medical College, held on the 22d ult., the degree of Doctor of Medicine was conferred on 52 young men. The valedictory was delivered by Dr. Charles W. Stevens.

☞ Many of our readers are now laying in their stock of Medicines, Instruments, etc., for the year. We would refer such to the advertising columns for reliable men to deal with. Those wishing saddle-bags, medicine chests, etc., can be accommodated by Migeod, 27 South Eighth street, corner of Jayne, or by Bullock & Crenshaw, Sixth street, above Arch, who can also furnish the *best quality of drugs, medicines, etc.* Kolbé, Ninth, above Chestnut street; Gemrig, Eighth street, opposite the Reporter office; and Helmbold, opposite the Jefferson Medical College, make their own instruments, as well as import foreign ones, and are all worthy of patronage. Country doctors must have Dental Instruments. Klein, 22 North Eighth street, can supply them. Orders may be sent through this office.

Interesting Scene at the Jefferson Medical College, Saturday, March 9th, 1861.—At eleven o'clock, on Saturday morning, previous to going to Musical Fund Hall to celebrate the Commencement, the Faculty of the College, with the trustees and the students of the Graduating Class, assembled in the large hall of the College, the occasion being the presentation by the Class to Professor Charles D. Meigs of a handsome portrait of himself, painted by Mr. Waugh, of this city.

The portrait was presented on behalf of the Class by Mr. Mitchell Picot, of this city, who, in a neat and appropriate address, alluded to the occasion which had called forth this token of esteem, the withdrawal of Professor Meigs from the position which he has so long occupied with honor to himself and the College.

To which Prof. Meigs responded substantially as follows:

Mr. Picot and Gentlemen of the Class:—I should be the most insensible of persons if I did not receive with deep feeling and lively sensibility, this expression of your favor and affection for me.

I therefore accept, with heartfelt gratitude, the present you make me to-day of a portrait, which you ordered to be painted through a committee of your own, by my friend, Mr. Waugh.

It seems to me that, in accepting this present, I have a just right to think that you have paid a compliment not to me alone, but to my colleagues, with whom I have so long and heartily co-operated in this institution in contributing my share to the instruction which this great institution is capable of communicating to those who assemble here from all parts of the world. This compliment, therefore, is paid not to me alone, but to the whole institution and to my worthy colleagues, from whom, in consequence of failing health and increasing years, I have been obliged to separate myself, depositing again in the hands of the trustees the commission which, twenty years ago, they saw fit to entrust to my keeping. In my own name, I thank you from the bottom of my heart.

I never can forget this occasion. I am about to retire from the world, and I do so with feelings of regret that I can no longer perform my part in it, as I have done, for, in all, some fifty-two years have elapsed since I joined myself to the profession of medicine.

I accept your gift as an omen of good for myself; I take it as an omen of good for you, for all of us, for students of medicine everywhere, and in all time, for all institutions for the promotion of medical learning.

You have this day, gentlemen, issued a proclamation of encouragement, and offered a reward for diligence to all public instructors of medicine, wherever they may be called, to spread abroad knowledge among men. What you have done to me this day is such a testimony as would gratify the desire of every man who endeavors to do his duty to you and to the world.

I accept the omen as for you, for you are this day to pass from the stage of the student's life, to the great stage of the world, in which a sacred office is about to be conferred on you. This venerable institution will, to-day, by a public and solemn ceremony, induct you into the society and rank of the physicians of America, and your happiness and your success will be enhanced by whatever may serve as commendation and encouragement from any, even the least of your brethren and colleagues in medicine, of whom I have become one of the least, though I am so honored by the present you have made me to-day.

The more faithfully you profit by the scientific, moral, and technical instruction you have reaped in the halls of the college which will to-day adopt you into the family of her children, the more will you love her as your alma mater, and the higher raise her in the estimation of the people.

You and I to-day become brethren in the literature, the science, the art, and the morals of our profession. Let us preserve them clear from blemish as long as we live, and by our whole lives, efforts, and conversation do all we can to render this institution, which has adopted us, more worthy of our most affectionate love and respect.

The Best Deodorant.—I know of no deodorant so instantaneous and powerful in its action as chlorine in some shape or other. In my own practice I always use the "liquor sodæ chlorinatæ" of the London Pharmacopœia. One part of this to twelve parts of distilled water makes a deodorant lotion sufficiently strong for all ordinary purposes. After amputation, by frequently wetting with this lotion the piece of linen thrown over the end of the stump, and the material (whatever it may be) put to catch the discharge, all smell may be prevented. Again, by pouring a little of the said lotion into the bed-pan before it is used, the fæces may be passed and removed from the chamber with their smell completely neutralized. An objection sometimes urged against the use of chlorine, is its own disagreeable odor, the remedy being to some persons as offensive as the evil it is intended to cure; but the truth is, that the smell of chlorine becomes perceptible only when there is no effluvium to destroy—directly the chlorine comes in contact with any effluvium, it enters into chemical combination with its hydrogen, and loses all smell. If, therefore, the strength of the lotion is judiciously proportioned to the intensity of the smell, the poison, of course, must neutralize the chlorine just as much as the chlorine does the poison. Thus,

the use of deodorants will not only save much disgust to the patient, but will at the same time annihilate a cause, which we know to be of itself able to induce an unhealthy condition of the body, and more or less to interfere with recovery.—*Mr. Symonds.—Medical Times and Gazette.*

The New Orleans Medical News and Hospital Gazette has expired in the arms of a new candidate for professional favor—*The New Orleans Medical Times.* Dr. A. Peniston is the editor. The *Times* looks well, and we trust will be liberally patronized.

DIED.

Broussais.—Dr. Francis Broussais, last surviving son of the celebrated Broussais, and himself an author of considerable eminence, died on the 1st of December last. His disease was endocarditis.

Tiedemann.—At Munich, Jan. 22d, Dr. Frederick Tiedemann, the eminent anatomist, physiologist, and man of general science, aged 80 years. Dr. Tiedemann has a son residing in this city.

McChesney.—In Trenton, N. J., on the 7th inst., Dr. Charles G. McChesney, in the 61st year of his age.

Answers to Correspondents.

M. P.—The following is the act passed by the Legislature of the State of Pennsylvania in regard to the sale of poisons:

"No apothecary, druggist, or other person, shall sell or dispose of by retail, morphia, strychnine, arsenic, prussic acid, or corrosive sublimate, except upon the prescription of a physician, or on the personal application of some respectable inhabitant of full age, of the town or place in which such sale shall be made. In all cases of such sale the word "poison" shall be carefully and legibly marked or placed upon the label, package, bottle, or other vessel, or thing in which such poison is contained; and when sold or disposed of otherwise than under the prescription of a physician, the apothecary, druggist, or other person selling or disposing of the same, shall note in a register kept for that purpose, the name and residence of the person to whom such sale was made, the quantity sold, and the date of such sale. Any person offending herein shall be guilty of a misdemeanor, and, on conviction, be sentenced to pay a fine not exceeding *fifty dollars.*"

COMMUNICATIONS RECEIVED.

Alabama—Dr. R. H. Lee, (with encl.) *Georgia*—Dr. Omar H. Paul, (with encl.) *Illinois*—Dr. C. H. Mills, Dr. J. N. Freeman. *Iowa*—Dr. E. J. Fountaine, (2.) *Louisiana*—Dr. G. W Dirmeyer. *Massachusetts*—Dr. H. H. Mitchell, (2,) Dr. J. B. Brown. *New Jersey*—Dr. A. H. Burgess, Dr. D. T. Bonnell, (with encl.,) Dr. Jacob Roberts. *New York*—Dr. Chas. T. Evans, Dr. S. D. Willard, Dr. Geo. K. Smith. *Ohio*—Dr. D. S. Snively, (with encl.,) Dr. G. R. Patton, (with encl.) *Pennsylvania*—Dr. J. L. Cook, Dr. R. H. Patterson, Dr. J. H. Keeler, Dr. J. Montgomery, Dr. J. W. Mackey.

Office Payments—Dr. J. H. Hoffman, Dr. D. Detwiler, (Pa.,) Dr. A. R. Tyson, (Pa.,) Dr. J. E. Revely, (Tenn.,) Dr. Philip D. Marshall, (Pa.,) Dr. Robert L. Henley, (Va.,) Augustus Arend, Dr. D. Cameron, (N. Y.) By Mr. Swayne: Dr. W. N. Handy.

WM. S. MERRELL & CO.,

MANUFACTURING PHARMACIANS,

AND

WHOLESALE DEALERS

IN

AMERICAN & FOREIGN MEDICINES,

Nos. 110 & 112 North Third St.,

CINCINNATI.

The above Proprietors are the oldest Apothecaries in the city, having commenced business here thirty-three years ago. But, of late years, they have dropped off the trade in Paints, Oils, Dye Stuffs, and the like usual accompaniments of the Drug Trade, and confined themselves chiefly to MEDICINES and CHEMICALS, including the Furniture and other Stock required by Physicians.

They have, at the same time, greatly extended their business into the line of the INDIGENOUS MATERIA MEDICA, till, in that branch, theirs is, doubtless, the largest House in America; and they have added a complete DRUG MILL Establishment, and an extensive MEDICAL LABORATORY.

They thus compete with the best Eastern Drug Mills in GRINDING and POWDERING Medicines of all kinds—with the Shakers in PRESSED HERBS and Roots and Common Extracts—with Tilden & Co., and others, in ALCOHOLIC EXTRACTS—with them and Thayer & Co., and others, in the FLUID EXTRACTS, and with Kirth & Co., and others, in the ISOLATED MEDICINAL PRINCIPLES, which, indeed, they were the first to prepare and introduce to the profession. And they are now bringing before the Profession a new class of medicinal agents, under the name of "ESSENTIAL TINCTURES," (which name they claim as their trade mark,) which are more definite, unchangeable, and certain in their operation than any Liquid Preparations before introduced. These are everywhere highly appreciated by Physicians of all Schools who have given them a trial.

They also prepare all the Syrups, Tinctures, Ointments, Plasters, etc., of the different Dispensatories.

All articles warranted of prime quality or subject to be returned, and prices as low as those of any other house.

Terms CASH, except to druggists of known standing. To such the usual discount to the trade will be made, and six months time given on bills over $100, payable with exchange on New York.

For further information send for their Catalogue and Price Current. 228-1y.

Interesting Scene at the Jefferson Medical College, Saturday, March 9th, 1861.—At eleven o'clock, on Saturday morning, previous to going to Musical Fund Hall to celebrate the Commencement, the Faculty of the College, with the trustees and the students of the Graduating Class, assembled in the large hall of the College, the occasion being the presentation by the Class to Professor Charles D. Meigs of a handsome portrait of himself, painted by Mr. Waugh, of this city.

The portrait was presented on behalf of the Class by Mr. Mitchell Picot, of this city, who, in a neat and appropriate address, alluded to the occasion which had called forth this token of esteem, the withdrawal of Professor Meigs from the position which he has so long occupied with honor to himself and the College.

To which Prof. Meigs responded substantially as follows:

Mr. Picot and Gentlemen of the Class:—I should be the most insensible of persons if I did not receive with deep feeling and lively sensibility, this expression of your favor and affection for me.

I therefore accept, with heartfelt gratitude, the present you make me to-day of a portrait, which you ordered to be painted through a committee of your own, by my friend, Mr. Waugh.

It seems to me that, in accepting this present, I have a just right to think that you have paid a compliment not to me alone, but to my colleagues, with whom I have so long and heartily co-operated in this institution in contributing my share to the instruction which this great institution is capable of communicating to those who assemble here from all parts of the world. This compliment, therefore, is paid not to me alone, but to the whole institution and to my worthy colleagues, from whom, in consequence of failing health and increasing years, I have been obliged to separate myself, depositing again in the hands of the trustees the commission which, twenty years ago, they saw fit to entrust to my keeping. In my own name, I thank you from the bottom of my heart.

I never can forget this occasion. I am about to retire from the world, and I do so with feelings of regret that I can no longer perform my part in it, as I have done, for, in all, some fifty-two years have elapsed since I joined myself to the profession of medicine.

I accept your gift as an omen of good for myself; I take it as an omen of good for you, for all of us, for students of medicine everywhere, and in all time, for all institutions for the promotion of medical learning.

You have this day, gentlemen, issued a proclamation of encouragement, and offered a reward for diligence to all public instructors of medicine, wherever they may be called, to spread abroad knowledge among men. What you have done to me this day is such a testimony as would gratify the desire of every man who endeavors to do his duty to you and to the world.

I accept the omen as for you, for you are this day to pass from the stage of the student's life, to the great stage of the world, in which a sacred office is about to be conferred on you. This venerable institution will, to-day, by a public and solemn ceremony, induct you into the society and rank of the physicians of America, and your happiness and your success will be enhanced by whatever may serve as commendation and encouragement from any, even the least of your brethren and colleagues in medicine, of whom I have become one of the least, though I am so honored by the present you have made me to-day.

The more faithfully you profit by the scientific, moral, and technical instruction you have reaped in the halls of the college which will to-day adopt you into the family of her children, the more will you love her as your alma mater, and the higher raise her in the estimation of the people.

You and I to-day become brethren in the literature, the science, the art, and the morals of our profession. Let us preserve them clear from blemish as long as we live, and by our whole lives, efforts, and conversation do all we can to render this institution, which has adopted us, more worthy of our most affectionate love and respect.

The Best Deodorant.—I know of no deodorant so instantaneous and powerful in its action as chlorine in some shape or other. In my own practice I always use the "liquor sodæ chlorinatæ" of the London Pharmacopœia. One part of this to twelve parts of distilled water makes a deodorant lotion sufficiently strong for all ordinary purposes. After amputation, by frequently wetting with this lotion the piece of linen thrown over the end of the stump, and the material (whatever it may be) put to catch the discharge, all smell may be prevented. Again, by pouring a little of the said lotion into the bed-pan before it is used, the fæces may be passed and removed from the chamber with their smell completely neutralized. An objection sometimes urged against the use of chlorine, is its own disagreeable odor, the remedy being to some persons as offensive as the evil it is intended to cure; but the truth is, that the smell of chlorine becomes perceptible only when there is no effluvium to destroy—directly the chlorine comes in contact with any effluvium, it enters into chemical combination with its hydrogen, and loses all smell. If, therefore, the strength of the lotion is judiciously proportioned to the intensity of the smell, the poison, of course, must neutralize the chlorine just as much as the chlorine does the poison. Thus,